

Mongolian Red List of Birds



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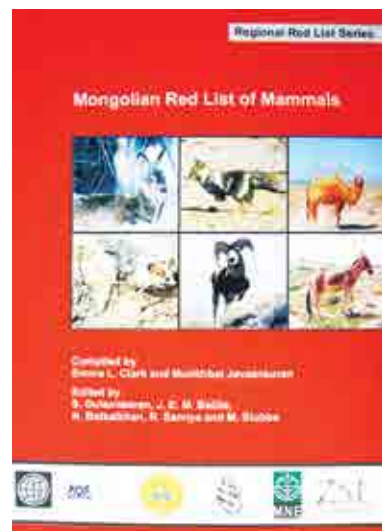
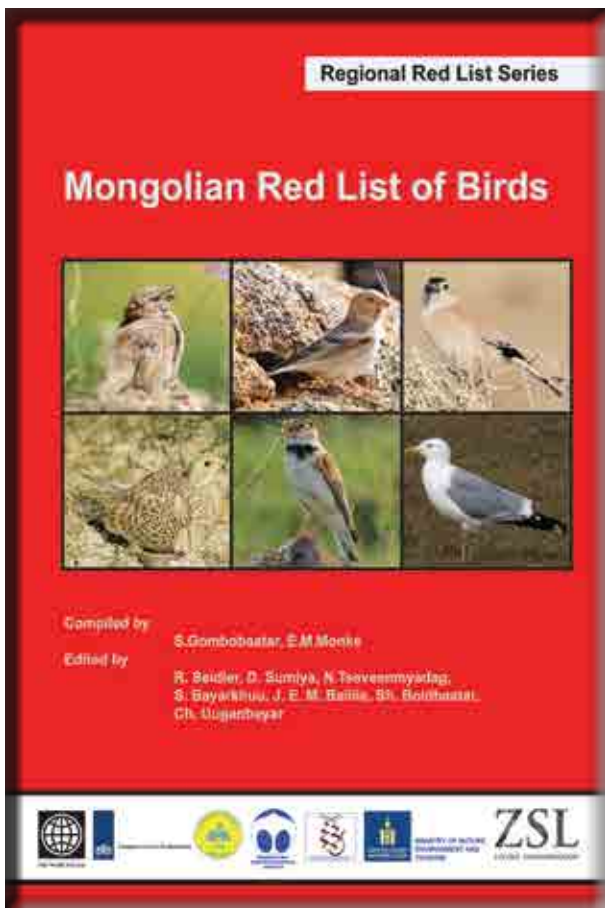
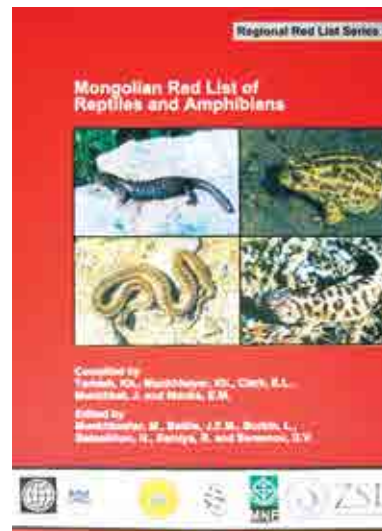
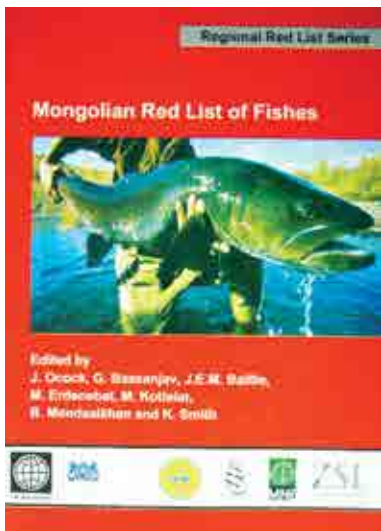
All involved in the production of the Red List and Summary Conservation Action Plans for Mongolian Birds and associated documents would like to thank the World Bank for the initiative, support, and guidance which has made the production of this book possible.

This book is part of the Regional Red List Series produced by the Zoological Society of London (ZSL). ZSL was founded in 1826, and is an international scientific, conservation and educational organization. Its mission is to achieve and promote the worldwide conservation of animals and their habitats. ZSL runs London Zoo and Whipsnade Wild Animal Park, carries out scientific research through the Institute of Zoology, and is actively involved in field conservation through international field conservation programmes.

In addition to the World Bank's Netherlands-Mongolia Trust Fund for Environmental Reform, ZSL, the National University of Mongolia, the Mongolian Academy of Sciences, and the Ministry of Nature, Environment and Tourism, the following organizations contributed to the process:







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This publication has been funded by the World Bank's Netherlands-Mongolia Trust Fund for Environmental Reform.

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The World Conservation Union (IUCN) have contributed to the production of the Mongolian Red List of birds, providing technical support, staff time, and data. IUCN supports the production of the Mongolian Red List of Birds, but the information contained in this document does not necessarily represent the views of IUCN.

Published by: Zoological Society of London, Mongolian Ornithological Society and National University of Mongolia.

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DDC 598.07234517 G-62

ISBN: 978-99962-0-572-9

Citation: Gombobaatar, S. and Monks, E.M. (compilers), Seidler, R., Sumiya, D., Tseveenmyadag, N., Bayarkhuu, S., Baillie, J. E. M., Boldbaatar, Sh., Uuganbayar, Ch. (editors) (2011). Regional Red List Series Vol.7. Birds. Zoological Society of London, National University of Mongolia and Mongolian Ornithological Society. (In English and Mongolian)

Keywords: Regional Red List, birds, Mongolia, taxonomy, distribution, biology and ecology, threats, conservation

Printed by: ADMON Printing, Ulaanbaatar

Front cover: Mongolian Accentor, Mongolian Finch, Mongolian Ground-jay, Pallas's Sandgrouse, Mongolian Lark, and Mongolian Gull courtesy of S.Gombobaatar

Back cover: Steppe Eagle, Mongolian Lark, Black-billed Capercaillie, Swan Goose, Siberian Rubythroat, Great Bustard, Small Snowfinch, Eurasian Spoonbill, Pallas's Sandgrouse, Eurasian Eagle-owl, and Pallas's Fish-eagle courtesy of S.Gombobaatar

The Mongolian Biodiversity Databank holds further details on all the species listed in this book. It is available to the public and can be accessed through:

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As only a limited number of hard copies will be produced, electronic versions of this report will be available through the ZSL library (<http://library.zsl.org>); www.regionalredlist.com; www.zuil.mn; www.mos.mn).

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FOREWORD

The completion of the Mongolia Red List of Birds represents a major milestone in conservation both within Mongolia and internationally. This impressive volume defines the conservation status of all birds in Mongolia for the first time ever, and is also the most comprehensive source of information on Mongolian birds produced to date. It is a resource that will be used by everyone from students to policy makers to conservation planners to leading ornithologists.

In addition to conservation status, information is provided on the distribution, population size, habitat and ecology, dominant threats and conservation measures for each species. Distribution maps, reviewed by experts, are also provided for all birds of Mongolia for the first time. This information is essential for conservation planning and priority setting both for individual species and for birds in Mongolia as a group.

In particular, the distribution information allows the data to be explored spatially, providing maps of areas of highest species richness or threat, and identifying species or regions where more research is needed. This information is also being made available on the internet. There it is possible to click any location on a digital map of Mongolia and find out which species occur there, as well as their conservation status. Such a tool is extremely important for Mongolia, where economic growth is rapid in the area of natural resource extraction and robust biodiversity information is needed for effective environmental impact assessments.

This volume now complements the Mongolian Red Lists of Mammals, Fish, and Reptiles and Amphibians. With the completion of the Red List of Birds, Mongolia is now among the few nations that have up-to-date conservation assessments for all vertebrates. This sets clear baselines from which future trends can be measured. It is now imperative that the Red Lists for each vertebrate group be updated every five years, so that trends in extinction risk can be measured through time.

As a result of the Red Listing process and the production of this book, we now know that a total of 36 Mongolian birds are Threatened or Near Threatened. Among the most threatened birds are Dalmatian Pelican (*Pelecanus crispus*) and Siberian Crane (*Grus leucogeranus*), both listed as Critically Endangered. Examples of other well-known threatened species include Pallas's Fish-eagle (*Haliaeetus leucoryphus*), Saker Falcon (*Falco cherrug*), and Great Bustard (*Otis tarda*).

While many species require additional conservation attention, the proportion of species threatened is lower in Mongolia than in many other parts of the world. Globally, 21% of the world's birds are Threatened or Near Threatened, whereas in Mongolia only 10 % of species fall into the same category. This is likely due to low human population density, large tracts of habitat that are relatively intact and a culture that has great respect for the natural world.

Mongolia has the opportunity to remain a refuge and safe passage for many species, but the threats are growing and concerted efforts will be needed if Mongolia is to uphold its recent commitment to the Convention on Biological Diversity's 2020 Aichi Biodiversity Targets. Vital in particular is target 12, which states that by 2020 the extinction of known threatened species will have been prevented, and that the conservation status—particularly of those species most in decline—will have been improved and sustained. With this book we now have both the information to help reverse the declines of threatened species and the data needed to start monitoring progress.

*Prof. Jonathan Baillie,
Director of Conservation Programmes
Zoological Society of London.*

PREFACE

“Biological diversity”, or “biodiversity”, refers not only to species diversity (or species richness), but also to genetic diversity and habitat diversity. Birds and their habitats are some of the most conspicuous components of biodiversity in Mongolia. Mongolia became signatory to the Convention of Biodiversity (CBD) in 1993. In the framework of the Convention, the main responsibility of Mongolia as a signatory is to assess all species and report on trends in biological diversity (particularly species richness) to the parties of the convention.

However, the critical issue for Mongolian ornithology was the species assessment using International standards like ‘IUCN Red List Categories and Criteria’ and data-banking for all species of birds. Mongolia is one of the top-priority countries for bird research and conservation, because it is located at the junction of three different migratory flyways and contains globally significant breeding grounds of threatened species. Gathering information and creating the database, assessing all species to international standards, and completing the Regional Red List of Mongolian Birds and Summary Action Plan for Threatened Species of Birds was challenging because of the large number of species, small number of experts and bird databases, uncertain and incomplete information and data, and non-standardized data collection over the last decade.

Mongolians are traditionally bird conservationists due to religious beliefs and nomadic life style. Economic and political changes in the 1990’s brought several serious threats to the birds of Mongolia, including poaching, legal and illegal trading and sport hunting. In recent years, drought (apparently caused by global climate change), and habitat degradation and loss caused by livestock have significantly threatened many species of birds in Mongolia. We have assessed some of these as Threatened in this publication.

During the Third Mongolian Biodiversity Databank Workshop in 2009 (which involved more than 40 experts), we assessed all species of birds in Mongolia using the IUCN Red List Categories and Criteria (IUCN, 2001). We also developed the National Bird Database and completed the Mongolian Red List of Birds and Summary Conservation Action Plans for Mongolian Birds. With the support of the Dutch Government and the World Bank, coordination by Zoological Society of London, National University of Mongolia, Mongolian Ministry of Nature, Environment and Tourism and Mongolian Ornithological Society, and with the collaboration of other international and national organizations, Mongolian ornithologists assessed all bird species occurring in Mongolia. In order to insure that the Mongolian Red List of Birds, Summary Conservation Action Plans for Mongolian Birds and National Bird Databank will be continued and updated in the future, we gave students and young ornithologists the opportunity to participate in the 2009 Workshop.

This publication is addressed to policy and decision makers, officers of environmental organizations, students, lecturers, professionals, private sector workers, and all bird lovers interested in the birds of this country. In it they will find science-based data, species assessments made to an international standard, and information about threats to the birds of Mongolia. The publication fills data gaps on particular species, and should help in understanding species-specific threats and in prioritizing conservation actions. We hope this work will be continued by succeeding generations of enthusiastic ornithologists, and that it will be extended in future to include the whole panoply of living organisms of Mongolia.

Gombobaatar Sundeav (Ph.D.)
Head of Ornithological Laboratory at the National University of Mongolia
President of the Mongolian Ornithological Society.

ACKNOWLEDGEMENTS

We would like to express our thanks to all contributing experts from Mongolia:

Osor Shagdarsuren, Damdin Sumiya, Ravchig Samiya, Nyamsuren Batsaikhan, and Jamsranjav Munkhbat (Faculty of Biology, National University of Mongolia), Galtbat Batbayar, Myagmarjav Munkhjargal (Steppe Forward Programme, National University of Mongolia), Natsagdorj Tseveenmyadag, Galbadrakh Mainjargal, Bayarmagnai Enkh-Orshikh, B.Mungunbagana (Mongolian Academy of Sciences), Chuluunbaatar Uuganbayar (Mongolian State University of Agriculture), S.Gantugs (Khovd University), Sandagdorj Bayarkhuu (Ministry of Nature, Environment and Tourism), Badamsed Delgermaa (Eastern Mongolian Protected Area Administration), Baasan Delgermaa (State Specialized Inspection Agency), Purevdorj Amartuvshin, Birazana Odkhuu, Bayandonoi Gantulga, Purevdorj Jargalsaikhan, Unenbat Tuvshin, Davaasuren Batmunkh, Enkhbat Unurjargal, Janchiv Ganchimeg, Bayarmagnai Yumjirmaa, and Valentin Schatz (Mongolian Ornithological Society), Dorj Usukhjargal and Tumurbaatar Batbaatar (Hustai Nuruu National Park), Khorloo Munkhbayar (Ecological Centre and Mongolian State University of Education), B.Bayarjargal, and P. Gankhuyag (Wildlife Science and Conservation Centre).

Our special thanks go to the experts from overseas for their contributions:

Jonathan Baillie (Zoological Society of London in UK), Michael Stubbe (Halle-Wittenberg University in Germany), Igor Fefelov (Research Institute of Biology at Irkutsk State University in Russia), Toshio Ikeuchi (Foster A Goose Programme in Japan), Stuart Butchart and Jez Bird (both of BirdLife International), Sally Wren and Tim Wacher (Zoological Society of London in UK).

This publication could not have been realized without the help of those that contributed to each stage of the book. Contributions were as follows:

Jonathan Baillie, Eleanor Monks, Reinmar Seidler, Sally Wren, and Tim Wacher (Zoological Society of London) for helping to run the workshop and editing the book;

Natsagdorj Tseveenmyadag, Shagdarsuren Boldbaatar, Damdin Sumiya, Sandagdorj Bayarkhuu, Chuluunbaatar Uuganbayar, Birazana Odkhuu, Bayandonoi Gantulga and Purevdorj Amartuvshin for their corrections and useful comments on bird distribution maps.

Michael Stubbe (Halle-Wittenberg University) for his help in filling gaps in the database on raptors, and for his invaluable knowledge and experience of raptors;

Igor Fefelov (Research Institute of Biology at Irkutsk State University) and Toshio Ikeuchi (Japan) for their encouragement and sharing their information on and experience with waterfowl;

Stuart Butchart and Jez Bird (BirdLife International) for participating in the workshops, filling gaps for each species, exchanging experiences and sharing information on redlisting at Birdlife International;

Tony Whitten (World Bank) for his continued encouragement from the outset of the proposal through to the workshop, for his participation at the workshop, and for sharing his experiences and knowledge on the importance of the regional Red Lists to those present at the workshop in Hustai National Park;

L.Ochirkhuyag (WCS) and P. Enkhkhuyag (GIS expert) for their help with GIS analysis, including overlapping maps and .shp-files for analyzing species distribution maps;

D.Sanjmyatav (WWF) and WWF for supporting the DEM file to illustrate all species distribution maps;

Bayarmagnai Yumjirmaa (Mongolian Ornithological Society) for her help in writing accounts of the breeding ecology of all breeding species and for her assistance with data sorting;

Radnaakhand Tungalag (National University of Mongolia) for her help in understanding and separating the plant communities and habitats based on the division of vegetation in the ecosystems of Mongolia on ArcView .shp-files;

Purevdorj Amartuvshin and Bayandonoi Gantulga (Mongolian Ornithological Society) for their help in illustrating and modifying maps of vagrants and rare passage migrants;

Mishig Tsogbadrakh (Dean of the Faculty of Biology until 2010) and Nyam-Osor Batkhuu (Director of the School of Biology and Biotechnology 2010-present) for their encouragement and support in providing meeting halls;

Ravchig Samiya (Vice President of the National University of Mongolia) for his encouragement, support in the provision of the hall for the workshop and for all assistance from the University;

Henry Brown (Steppe Forward Programme, National University of Mongolia) for proof reading and helping to format the book;

Myagmarjav Munkhjargal (Steppe Forward Programme, National University of Mongolia) for her excellent translation during the workshop;

Purevdorj Amartuvshin, Bayandonoi Gantulga (Mongolian Ornithological Society) for their help in drawing the species distribution maps and for technical assistance with the maps and illustrations;

Purevdorj Amartuvshin, Biraazana Odkhuu, Bayandonoi Gantulga, Purevdorj Jargalsaikhan, Unenbat Tuvshin, Davaasuren Batmunkh, Enkhbat Unurjargal, Janchiv Ganchimeg, Nadmidtogooyanjintsevel, Jamsran Munkh-Erdene, Bayagmagnai Yumjirmaa, Naranbaatar Nomin (Mongolian Ornithological Society) for searching through all references, filling gaps in the literature and arranging workshops and ground trips between Ulaanbaatar and Hustai National Park;

Sally Wren and Gitanjali B. Bhattacharya (Zoological Society of London, UK) for collecting and combining all databases on the SIS DEM.

Prof. Reuven Yosef (Israel), Ronald and Lynette Mitchell (Great Britain), Toshio Ikeuchi (Japan), Dr. D.Jargalsaikhan (Mongolia), Dr. Eugene Potapov (Russia), Dr. K.Ozaki (Japan), and Prof. Lee Woo-Shin (Korea), and Israeli friends (Tzadok and Noam Weiss) for their continuous supports and helps for Gombobaatar's bird photographs.

We would not have been able to publish this book without help of the following bird photographers: Akira Nomura, A.Andreev, Y.Artukhin, Askar Isabekov, Barry Boswell, Bayandonoi Gantulga, Bjorn Anderson, Chang-Yong CHOI, Choi Ham MOON, Chuluunbaatar Uuganbayar, Dagdan Suran, Davaasuren Batmunkh, David Bakewell, Ding Li, Dorj Usukhjargal, Eugene Potapov, Frank Weihe, Gennady Dyakin, Guy Shorrocks, Hiromi Konishi, Hyun-Young NAM, Igor Fefelov, Inki KWON, Jari Peltmocki, Jin Hwan Choi, Jo Ann MacKenzie, John Kirk, Jonathan Martinez, Jugal Tiwari, Kah Wai Lin, Karl-Heinz Schindlitz, Khumbaa Tumdendelger, Kim Sung Hyun, V.Kurechmar, Lim Kim Chye, Luigi Sebastiani, Manjula Mathur, Manoj Sharma, Martin Hale, Max Vakiala, Michiaki Ujihara, Nitin Srinivasamurthy, Nyamsuren Batsaikhan, Osao Ujihara, Pan, Chih-Yuan, Rajneesh Suvarna, Richard Reading, Rishad Naoroji, Shagdarsuren Boldbaatar, Setev Shar, Tom Beeke, Tom Tams, Toshio Ikeuchi, Toshiyuki Matsumura, Tumurbaatar Batbaatar, Vijay Anand Ismavel, Yasuo Watanabe, Yeo Swee Cheong, and Young Min MOON.

Without the help and comments of our editors this book would not have been published. Our sincere thanks go to all those involved in the production of this book.

This publication is one of the outputs of the Mongolian Biodiversity Databank Project, initiated and funded by the World Bank and implemented by the Zoological Society of London (ZSL) (regionally represented by the Steppe Forward Programme) and the National University of Mongolia, in collaboration with the Mongolian Ornithological Society, Mongolian Academy of Sciences, the Ministry of Nature and Environment, the World Conservation Union (IUCN), and many other regional and international organisations. We would like to highlight the following organisations which played important roles in the Mongolian Biodiversity Databank Project:

The World Bank (with funding from the Royal Netherlands Embassy, Beijing) initiated the Mongolian Biodiversity Databank Project, and provided generous financial support without which production of the Mongolian Red List of Birds would not have been possible. Special thanks are extended to Tony Whitten, who has guided this project through every stage of its development. Our thanks go to Mrs B.Enkhtsetseg for her encouragements and helps.

The World Conservation Union (IUCN) played a fundamental role in the production of this book and associated documents. We thank IUCN for use of the IUCN Red List Categories and Criteria, technical advice, data, and for staff participation.

The Zoological Society of London (ZSL) led the implementation of the Mongolian Biodiversity Databank Project. Jonathan Baillie (project leader), Eleanor Monks, Sally Wren and Gitanjali B. Bhattacharya (project coordinator) are all based at ZSL. Special thanks are extended to Glyn Davies, Director of Conservation Programme, for her leadership and guidance throughout the project.

The National University of Mongolia (NUM) provided the venue for the workshop, and is also home to the Steppe Forward Programme and the Mongolian Biodiversity Databank. The University was actively involved in supporting the project throughout its development and implementation. Special thanks go to Sundeв Gombobaatar, Osor Shagdarsuren, Damdin Sumiya, Ravchig Samiya and Batsaikhan Nyamsuren for guidance, support, contributions, and expert advice at the workshop.

Mongolian Ornithological Society (MOS) led the process of creating the database on birds, typesetting and completing the Red List. Our special thanks go to all staff of the Society including Damdin Sumiya, Chuluunbaatar Uuganbayar, Badamsed Delgermaa, Purevdorj Amartuvshin, Birazana Odkhuu, Bayandonoi Gantulga, Purevdorj Jargalsaikhan, Unenbat Tövshin, Davaasuren Batmunkh, Enkhbat Unurjargal, Janchiv Ganchimeg, Nadmidtogoо Yanjintsevel, Bayarmagnai Yumjirmaa, Valentin Schatz (German), and Naranbaatar Nomin for their efforts in searching the literature, filling information gaps, helping with the production of species distribution maps, for help with workshop logistics and for expert contributions at the workshop.

Steppe Forward Programme (SFP) started as a Darwin Initiative (UK-DEFRA) project and has been running in Mongolia since 2003. This project is administered by ZSL and works in collaboration with the National University of Mongolia. We would like to thank all the staff at this programme, particularly Sundeв Gombobaatar for his research skills and dedication, Henry Brown, Eleanor Monks and Galtbat Batbayar for their advice and guidance, and Myagmarjav Munkhjargal for her advice and excellent translation work.

The Mongolian Academy of Sciences (MAS) are thanked for their sharing of knowledge and for contributing to the effectiveness of the workshop. We would like to thank all the dedicated biologists, Natsagdorj Tseveenmyadag, Shagdarsuren Boldbaatar, Bayarmagnai Enkh-Orshikh and B.Mungunbagana, who contributed their time and knowledge to this project, many of whom also participated in the workshop.

The Ministry of Nature, Environment and Tourism (MNET) supported the project and its aims throughout its development and implementation. Our special thanks to Ch. Jargalsaikhan (Vice Minister of the MNET), D.Enkhbat, Ts.Banzragch, D.Batbold, A. Namkhai, S.Bayarkhuu, and P.Tsogtsaikhan for their help and encouragement.

The Mongolian State University of Education (MSUE), Mongolian State University of Agriculture (MSUA), Eastern Mongolian Protected Area Administration (EMPAA) actively supported and participated in this project. Special thanks go to Khorloo Munkhbayar and Munkhbayar Munkhbaatar from the Ecological Centre of the State University of Education, Chuluunbaatar Uuganbayar from the MSUE and Badamsad Delgermaa from the EMPAA for sharing their vast knowledge and for their dedication throughout the process.

BirdLife International (BI) participated in the workshop, shared data on species and exchanged experiences on the redlisting of birds. We would like to thank Stuart Butchart and Jez Bird for their knowledge and for dedication throughout the process.

Halle-Wittenberg University, Germany (HWU), Irkutsk State University, Russia (ISU) and Foster A Goose Programme, Japan (FGP) are thanked for their support for, and involvement in, this project. Special thanks are extended to Michael Stubbe, Igor Fefelov, and Toshio Ikeuchi for their invaluable advice.

INTRODUCTION

Mongolia is a vast country with diverse natural zones and landscapes, harbouring a rich and unique assemblage of birds. The country is located the junction of three migratory flyways. Over the past decades Mongolia has undergone significant social and economic changes, and during this time period many groups of birds, including cranes, breeding shorebirds, raptors and some passerines, have experienced rapid declines. These declines have been relatively well documented for a few species, such as Reed Parrotbill and Yellow-breasted Bunting.

This Red List contains all known Mongolian birds and highlights their status within Mongolia, accompanied by other information such as their global and regional distribution, legal status, habitats, ecology, breeding biology, dominant threats and conservation measures. Species have been assessed using the 'IUCN Red List Categories and Criteria' (IUCN, 2001), which incorporate quantitative thresholds to categorise species in terms of their risk of extinction (Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild, and Extinct). The assessments were carried out by over 40 leading experts on Mongolian birds, gathered at the Mongolian Biodiversity Databank workshop from September 30 to October 5, 2009.

Both threatened and non-threatened Mongolian birds are presented in this document, in order to identify all species that have been assessed and to provide an indication of the overall status of the country's avifauna. The publication also provides detailed information on habitat and ecology, an excellent field guide of all birds found in Mongolia.

The experts involved in the production of the Red List also helped to develop the Mongolian Biodiversity Databank for birds, available from the Zoological Society of London, Department of Zoology at the National University of Mongolia and Mongolian Ornithological Society. Summary conservation action plans were also composed, providing detailed information on all threatened birds and actions necessary to ensure their future survival. These summary conservation action plans are published in a separate document, and electronic versions will be available through the Zoological Society of London library (<http://library.zsl.org>; www.regionalRedList.com, www.zuil.mn, or www.mos.mn).

The Mongolian Red List of Birds is one of the most significant publications for the conservation of birds in Mongolia. This publication provides policy makers with the most up-to-date information on all bird species, particularly threatened birds, allowing informed decisions to be made and providing conservationists with the essential information required to develop detailed conservation action plans and to set priorities for conservation.

This Red List series shows that several bird species have recently become threatened with extinction. This publication will be important for conducting long term monitoring and conservation assessments, to ensure that individual species do not move towards extinction. By clarifying the current state of knowledge, the Red List helps to identify where future research and conservation are most needed. This document represents a powerful step toward bird research and conservation in Mongolia. We hope it will encourage engagement with what is still a relatively poorly known, though fascinating group of birds.

APPLICATION OF THE IUCN RED LIST CATEGORIES AND CRITERIA AT A REGIONAL LEVEL

Red Lists, or lists that highlight threatened species, have been in existence for nearly 60 years (Baillie & Groombridge, 1996). They have become an important tool in assessing extinction risk for widely different taxa, and are often considered the first step in setting priorities for conservation actions and focusing attention on threatened species (Lamoreux *et al.*, 2003). The initial, relatively subjective method of defining species conservation status was replaced in 1994 by a set of more objective, quantitative criteria, which has helped to standardize the way in which species are classified according to their global extinction risk (Mace, 1994). These new criteria were applied for the first time in the '1996 IUCN Red List of Threatened Species' (Baillie & Groombridge, 1996). The 'IUCN Red List Categories and Criteria' (IUCN, 2001) are now recognized as an international standard, and used by many countries and organizations throughout the world.

The Red List of Mongolian Birds, compiled at the Third International Mongolian Biodiversity Databank Workshop, follows the 'Guidelines for Application of IUCN Red List Criteria at Regional Levels: Version 3.0' (IUCN, 2003). These guidelines assess the risk of regional extinction, and therefore address a number of issues not encountered when conducting assessments on a global scale. For example, a regional assessment has to take into account species that migrate between countries, or populations that are restricted to one country but dependent on immigration from another country. To ensure a reliable assessment of the risk of regional extinction, the guidelines have two important features.

First, they include two new categories: Regionally Extinct (RE) and Not Applicable (NA) (Table 1). RE describes species that remain globally extant, but are no longer found within the specific region; NA describes species that are deemed ineligible for assessment. At the Third International Mongolian Biodiversity Databank Workshop 2009, NA species were defined as taxa that are known to have less than 1% of their global population in Mongolia, and have regional distributions that cover less than 1% of the area of Mongolia. Second, the guidelines prescribe a two-step process.

The 'IUCN Red List Categories and Criteria' (IUCN, 2001) are first applied to regional population data as though they represent the global population (see Annex I for summarized details). This assessment is then adjusted based on the influence of populations outside the region. For example, if a taxon is threatened regionally, but immigration taking place from outside the region constitutes a 'rescue' effect, this decreases the risk of regional extinction and the assessment can be downgraded accordingly. An assessment can be upgraded to a higher category of threat if the regional population is declining or is a 'sink' population, with no possibility of 'rescue' from outside. If there is no information on the effects of populations surrounding the region, no alteration is made (for further details see IUCN, 2003). This provides the taxon with a Red List assessment that better reflects the risk of extinction within the defined region.

Table 1. Definition of the categories used in the Red List (see IUCN, 2001 and 2003).

Extinct (EX)	<i>A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), and throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.</i>
Extinct in the Wild (EW)	<i>A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), and throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.</i>
Regionally Extinct (RE)	<i>A taxon is Regionally Extinct when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or disappeared from the region: in the case of a former visiting taxon, individuals no longer visit the region. It is not possible to set general rules for a time period before a species is classified as RE. This will depend on how much effort has been devoted to searches for the species.</i>
Critically Endangered (CR)	<i>A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild.</i>
Endangered (EN)	<i>A taxon is Endangered when the best available evidence indicates that it meets any of the criteria to E for Endangered and it is therefore considered to be facing a very high risk of extinction in the wild.</i>
Vulnerable (VU)	<i>A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria to E for Vulnerable and it is therefore considered to be facing a high risk of extinction in the wild.</i>
Near Threatened (NT)	<i>A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.</i>
Least Concern (LC)	<i>A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.</i>
Data Deficient (DD)	<i>A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.</i>
Not Applicable (NA)	<i>Taxon deemed ineligible for assessment at a regional level.</i>

TECHNICAL NOTES

Nomenclature and Taxonomy

The global IUCN Red List for Birds follows the Bird-List of BirdLife International (2011). This list is updated and modified each year by Taxonomic Working Groups. Most countries that have completed regional Red Lists for Birds use the nomenclature and taxonomy adopted by BirdLife International. The Mongolian Bird Rarity and Taxonomy Committee and experts made the decision to use this nomenclature and taxonomy due to its widespread use in Red Lists globally, the frequency with which the taxonomy is reviewed, and the practicalities of its use. The nomenclature and taxonomy of BirdLife International follows Sibley & Monroe (1990&1993), with minor changes. For the present Red List, we follow BirdLife International (2011) with a few minor changes to selected species in light of recent publications.

BirdLife International (2011) and other major bird taxonomy references have not treated the following subspecies as being separate: Macqueen's Bustard (*Chlamydotis undulata macqueenii*) (Sangster, 1996; Sangster *et al.*, 1999; Knox *et al.*, 2002); Black-throated Thrush or Dark-throated Thrush (*Turdus ruficollis atrogularis*) (Dawaa *et al.*, 1994; Clement *et al.*, 2000; Clements, 2007&2010; Arlott, 2007; Sibley & Monroe, 1990 & 1993; BirdLife International, 2010&2011); Dusky Thrush (*Turdus naumanni oenopus*) (Dawaa *et al.*, 1994; Clements, 2007&2010; Arlott, 2007; Sibley & Monroe, 1990 & 1993; BirdLife International, 2010&2011); Pale Sand Martin (*Riparia riparia diluta*) (Gavrilov&Savchenko, 1991; Goroshko, 1993; del Hoyo *et al.*, 2004; Loskot, 2006; Schweizer&Aye, 2007; Clements, 2007); Masked Wagtail or Pied Wagtail (*Motacilla alba personata*) (Stepanyan, 1978, 1990 & 2003; Bold *et al.*, 2007; Gombobaatar, 2009); Green-headed Wagtail (*Motacilla flava taivana*) (Stepanyan, 1990; Fomin&Bold, 1991; Dawaa *et al.*, 1994; Sangster *et al.*, 1998; Bold *et al.*, 2001; Bold *et al.*, 2002; Bold *et al.*, 2007; Gombobaatar, 2009); Hooded Crow (*Corvus corone cornix*) (Fomin & Bold, 1991; Stepanyan, 1990; Snow *et al.*, 1998; Knox *et al.*, 2002; Stepanyan, 2003; Bold *et al.*, 2007; Gombobaatar, 2009); Two-barred Greenish Warbler (*Phylloscopus trochiloides plumbeitarsus*) and Bright Green Warbler (*Phylloscopus trochiloides nitidus*) (Stepanyan, 1990; Fomin&Bold, 1991; Dawaa *et al.*, 1994; Bold *et al.*, 2001; Bold *et al.*, 2002; Bold *et al.*, 2007; Gombobaatar, 2009); Turkestan Tit (*Parus major bokharensis*) (Dawaa *et al.*, 1994; Päckert *et al.*, 2005; Bold *et al.*, 2007; Gombobaatar, 2009); Grey-crowned Goldfinch (*Carduelis carduelis caniceps*) (Clement *et al.*, 1993; Howard & Moore, 1994; Dawaa *et al.*, 1994; Stepanyan (1978, 1990 & 2003; Gavrilov, 1999; Gavrilov&Gavrilov, 2005; Bold *et al.*, 2007; Gombobaatar, 2009); Baikal Bullfinch (*Pyrrhula pyrrhula cineracea*) (Stepanyan, 1978, 1990&2003; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Gavrilov, 1999; Gavrilov & Gavrilov, 2005; Bold *et al.*, 2007; Gombobaatar, 2009).

BirdLife International (2011) treated the following—previously considered subspecies—as full species: Hume's Whitethroat (1978, 1990&2003; Fomin&Bold, 1991; Sibley & Monroe, 1990& 1993; Dawaa *et al.*, 1994; Snow *et al.*, 1998; Bold *et al.*, 2007; BirdLife International (2004, 2008, 2010 & 2011) and White-crowned Penduline-tit (Sibley&Monroe, 1990&1993; Clements, 2007; BirdLife International, 2004, 2008, 2010&2011)).

The English name of Desert Warbler has changed to Asian Desert Warbler (Howard & Moore, 1994; Shirihai *et al.*, 2001; AERC TAC, 2003; del Hoyo *et al.*, 2006; BirdLife International, 2011).

Several genera have changed as follows: Mountain Hawk-eagle (*Spizaetus nipalensis*) to (*Nisaetus nipalensis*) (BirdLife International, 2011); Swinhoe's Rail (*Porzana exquisitus*) to (*Coturnicops exquisitus*) (BirdLife International, 2011); Sociable Plover (*Chettusia gregarius*) to (*Vanellus gregarius*) (Dowsett & Forbes-Watson, 1993; Sibley & Monroe, 1990 & 1993; BirdLife International, 2011); Grey-headed Lapwing (*Microsarcops cinereus*) to *Vanellus cinereus* (Sibley & Monroe, 1990& 1993; BirdLife International, 2011); Siberian Thrush (*Turdus sibiricus*) to Siberian Thrush (*Zoothera sibiricus*) (del Hoyo *et al.*, 2005; BirdLife International, 2011); Vinous-throated Parrotbill (*Suthora webbiana*) to (*Paradoxornis webbiana*); and Eurasian Siskin (*Spinus spinus*) to (*Cardeulis spinus*) (BirdLife International, 2011).

Due to the above changes to genera, several Mongolian names have changed as follows: Bichilhen tunjger to Bichilhen tunjeehei (*Coturnicops exquisitus*); Heeriin khavtgalj to Heeriin khavtgaalj (*Chettusia gregarius*); Saarial zuunkhurga (*Vanellus cinereus*) to Saarial khavtgaalj; Shiver hööndei (*Zoothera sibiricus*) to Shiver hööndii (*Turdus sibiricus*); Bor amurag (*Suthora webbiana*) to Amurag khuragchbor (*Paradoxornis webbiana*), and from Egel nogoolzoi (*Spinus spinus*) to Egel bujiranga (*Cardeulis spinus*).

For the purpose of this Red List a number of changes were not accepted. These include the following: Marsh Grassbird from (*Megalurus pryeri*) to (*Locustella pryeri*); Mongolian Finch from (*Bucanetes mongolicus*) to (*Eremopsaltria mongolicus*); Small Snowfinch from (*Pyrgilauda davidiana*) to (*Montifringilla davidiana*). At the time of writing, Birdlife International (2011) treat the Mongolian Gull (*Larus mongolicus*) as the Herring Gull (*Larus argentatus*), however, we do not accept this change.

The above detailed changes are included in the *Taxonomical notes* section in relevant species accounts. The minor changes that have been made in this book correspond to the nomenclature and taxonomy of previously published Bird Lists of Mongolia such as Fomin&Bold (1991), Reading *et al.* (1994), Dawaa *et al.* (1994), Bold *et al.* (2001), Bold *et al.* (2002), Bold *et al.*, 2007, Gombobaatar (2009), each of which followed Stepanyan (1990&2003). Further modifications to the World Bird-List were made by Clements (2007), and Sibley & Monroe (1990&1993).

Regional distributions and species distribution maps

Fomin&Bold (1991) describe the distribution of birds in Mongolia based on the botanical-geographical subdivisions made by A.A.Yunatov (1950), V.I.Grubov (1955, 1959, 1963, 1982), N.Ulziikhutag (1989) and Pavlov *et al.* (2005). They also describe a general separation of breeding and non-breeding sites. Based on Fomin & Bold (1991), Dawaa *et al.* (1994) and other references on species distributions, we have drawn very general polygon distribution maps for each species in mono-colour on ArcView 3.1 and ArcMap 9.2. After completing this process, unsuitable breeding and non-breeding habitats were subtracted from the original distribution polygons. The separation of habitats was based on .shp-files for habitats such as natural zones, belts, bodies of water from small to large rivers and lakes, creeks, springs and oases, alpine meadow, alpine sub-meadow, high mountains of varying altitudes, low hills, plant communities such as *Caragana*, reeds, coniferous and deciduous trees, etc. These .shp-files were created by numerous organizations including WWF, the Mongolian Ornithological Society, the GIS laboratory of the National University of Mongolia and the Russian and Mongolian Academy of Sciences (Pavlov *et al.*, 2005). Based on these .shp files, we were able to illustrate general and potential habitats for each bird species found in Mongolia. We added the exact co-ordinates for every species distribution record to the distribution map using small dots and polygons.

The primary distribution map created for each species thus combines areas where the species could potentially occur in during breeding season, migration and wintering seasons. The rigorous separation of breeding habitats would have been challenging to illustrate on the maps, due to the uncertainty of breeding records and lack of information. Most information on breeding was taken from Fomin & Bold (1991) and Dawaa *et al.* (1994). Due to uncertainty of breeding records, we have illustrated potential breeding habitats using .shp-files containing the habitat division, habitat type, habitat analysis and other habitat details based on vegetation and land cover extracted from the botanical-geographical subdivisions by Bannikov (1954), Tsegmid (1969), Yunatov (1950), Grubov (1955, 1959, 1963, 1982), Ulziikhutag (1989) and Pavlov *et al.* (2005) for each species that breeds in Mongolia (Figure 1). We have added exact co-ordinates of breeding records where they exist in the literature.

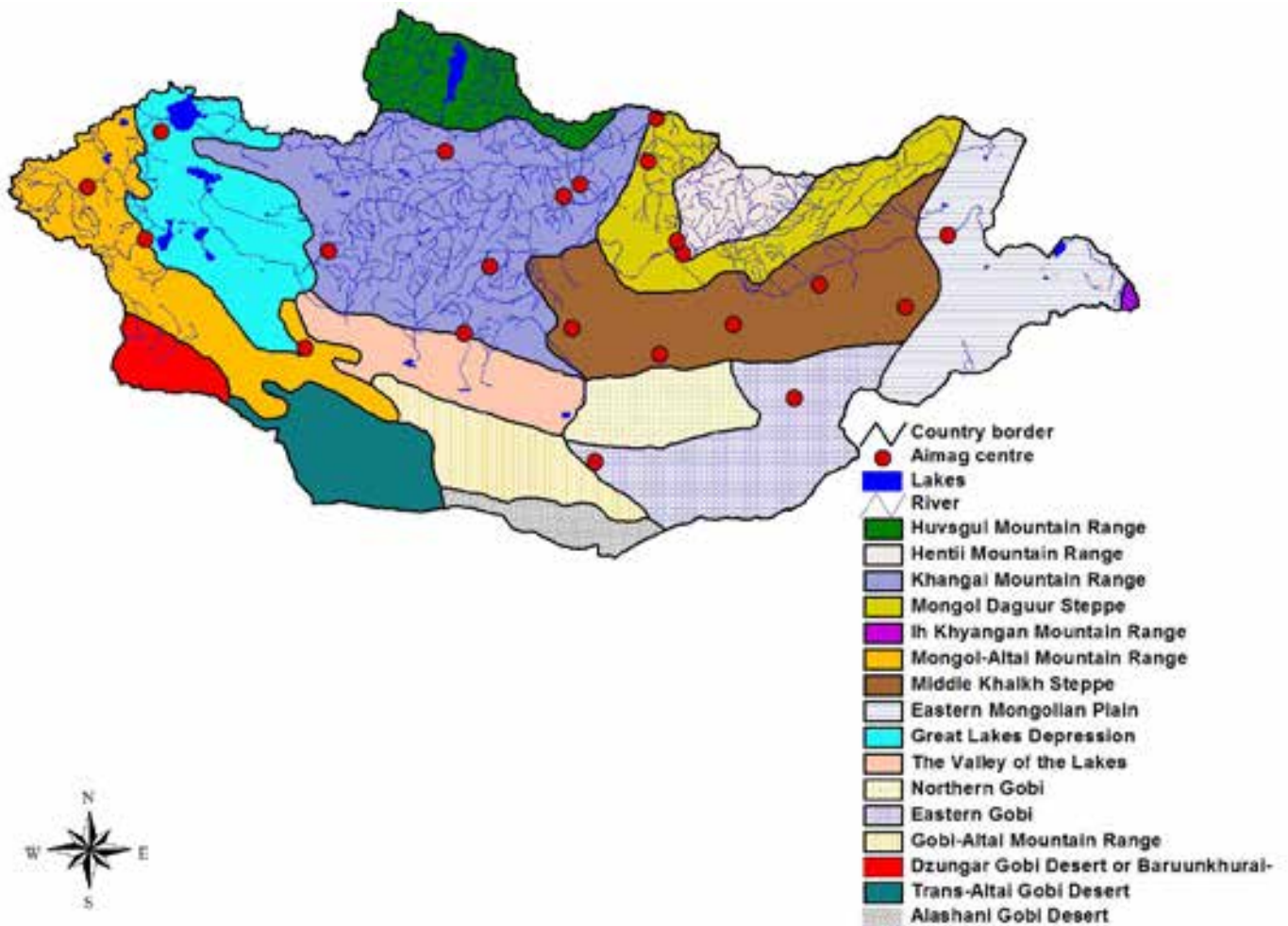


Figure 1. Geographic subdivision of Mongolia used to describe the regional distribution of Mongolian birds (Tsegmid, 1969)

Species photographs

Species photographs were kindly contributed by various bird photographers from different countries including Mongolia, Canada, China, Finland, France, Germany, India, Israel, Italy, Japan, Kazakhstan, Malaysia, Singapore, Russia, South Korea, Taiwan, UK and USA. Few photographs in the book do not show characters and identification features of bird species occurring in the country because the photographs were taken outside of Mongolia.

FORMAT OF SPECIES ACCOUNTS

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Family:
Scientific Name: **Species Authority:** **Common Names:**

We have adopted the nomenclature of the Taxonomy Working Group of Birdlife International (2011), with minor changes. The forms of the Mongolian names in Latin alphabet are those followed by Bold *et al.* (2001), Bold *et al.* (2002), Bold *et al.*, 2007, and Gombobaatar (2009), with minor changes.

Subspecies in Mongolia:

As mentioned above, we have used the taxonomical notes of Birdlife International (2011). The distribution of subspecies is that described by the most recent published monographs, books, scientific papers and other references available for each species such as Loons, Grebes, Cormorants, Bitterns, and Geese (Baker, 1993; Howard & Moore, 1994; Wild Bird Society of Japan, 2000), Swans (Madge & Burn, 1988; Howard & Moore, 1994), ducks (Madge & Burn, 1988; del Hoyo *et al.*, 1992; Howard & Moore, 1994; Wild Bird Society of Japan, 2000), raptors (Howard & Moore, 1994&2003; Wild Bird Society of Japan, 2000; Ferguson-Lees & Christie, 2001), Ptarmigans (Howard & Moore, 1994; Madge & McGowan, 2002), Cranes (Howard & Moore, 1994; Meine & Archibald, 1996; Wild Bird Society of Japan, 2000), Rails (Baker, 1993; Howard & Moore, 1994; Taylor & Perlo, 1998), Thick-knee (Prater *et al.*, 1997; Message & Taylor, 2005), Painted-snipes and Snipes (Howard & Moore, 1994&2003; Wild Bird Society of Japan, 2000; Message & Taylor, 2005), Plovers and Sandpipers (Prater *et al.*, 1997; Message & Taylor, 2005; Prater *et al.*, 1997), Gulls and Terns (Howard & Moore, 1994; Olson & Larsson, 2003), Pigeons and Doves (Howard & Moore, 1994; Dawaa *et al.*, 1994; del Hoyo *et al.*, 1997), Owls (del Hoyo *et al.*, 1999), Kingfishers (del Hoyo *et al.*, 2001), Wryneck and Woodpeckers (del Hoyo *et al.*, 2002), Sand Martin and Swallows (Svensson, 1992; Howard & Moore, 1994; del Hoyo *et al.*, 2004), Pipits and Wagtails (Alström & Mild, 2003; del Hoyo *et al.*, 2004), Shrikes (Harris & Franklin, 2000), Starling (Howard & Moore, 1994; Feare *et al.*, 1999), Jays and Corvids (Svensson, 1992; Howard & Moore, 1994; Madge & Burn, 1999), Dipper (del Hoyo *et al.*, 2005), Grasshopper-warblers, Whitethroats and Warblers (Howard & Moore, 2003; Shirihai *et al.*, 2001; del Hoyo *et al.*, 2006), Stonechat (Cramp&Simmons, 1977-1994; Dowsett & Forbes-Watson, 1993), Redstarts (del Hoyo *et al.*, 2005), Parrotbills (del Hoyo *et al.*, 2007), Tits (del Hoyo *et al.*, 2007), Sparrows (Clement *et al.*, 1993; Howard & Moore, 1994), and Buntings (Howard & Moore, 1994; Byers *et al.*, 1995).

Global status: (global risk of extinction)

The IUCN global population assessment for each species given in the '2004 IUCN Red List of Threatened Species' (IUCN, 2004) and Birdlife International (2011).

Regional status: (risk of extinction within Mongolia)

Regional assessments conducted for the first time for Mongolian birds using the 'IUCN Red List Categories and Criteria: Version 3.1' (IUCN, 2001) (see Table 1 for categories and their definitions) and the 'Guidelines for Application of IUCN Red List Criteria at Regional Levels: Version 3.0' (IUCN, 2003).

Rationale for assessment:

Rationale for the application of the 'IUCN Red List Categories and Criteria' (IUCN, 2001) to each species assessed at the Mongolian Biodiversity Databank Workshop. This section should be read in conjunction with the 'Guidelines for the Application of IUCN Red List Criteria at Regional Levels: Version 3.0' (IUCN, 2003) and the Mongolian Biodiversity Databank.

History:

The year of historical assessments of the species in Mongolia.

Year assessed:

The year of assessment and re-assessment of the species in Mongolia.

Assessors:

The first assessor's name for the species.

Reviewers:

Name and occupation of national and international reviewers that reviewed the first assessor's assessment for the species during the expert workshops.

Global distribution:

Listed from west to east and based largely on IUCN (2004) Birdlife International (2009, 2010&2011) data and additional references given in relevant species accounts.

Regional distribution:

Accompanied by a distribution map for Mongolia. These maps were illustrated by Sundev Gombobaatar and his team at the National University of Mongolia and Mongolian Ornithological Society and reviewed by Damdin Sumiya, Natsagdorj Tseveenmaydag, Shagdarsuren Boldbaatar, Chuluunbaatar Uuganbayar, and Sandagdorj Bayarkhuu. They were updated during the Mongolian Biodiversity Databank Workshop, based on new information from the scientific literature, museum records, government and conservation organisation documents, and expert observations. As further research is conducted, changes to these maps are likely to occur.

Population:

The world population and breeding and resident ranges estimated by Birdlife International (2011) have been used for this publication.

Regional population trend:

The population trend is that experienced by the species since the year 2000.

Habitats & ecology:

The habitat and ecology of each species is detailed. The breeding ecology, habitat for breeding and non-breeding birds and migration behavior is described for each species. This data came from several major references including Harrison (1975), del Hoyo *et al.*, (1992, 1997, 1999, 2001, 2002, 2004, 2005, 2006, and 2007) and other major references on bird biology and ecology.

Habitat Type:

We have used the main habitats included in the Red List database. Habitats for both breeding and non-breeding birds are included in the text, written in the shortened number format. A key to the numbering system can be found in the annex chapter. The numbering system is also explained in the Mongolian Biodiversity Databank.

Dominant threats:

A brief outline of the dominant threats to each species and their causes identified during the Mongolian Biodiversity Databank Workshop are described in the text. Threat processes can be complex and reflect multiple factors. For more detailed information, please refer to the annex chapter and the Mongolian Biodiversity Databank.

Conservation measures:

Existing protective legislature for Mongolian birds, including both Mongolian laws (e.g. Hunting Laws and the Law on Fauna) and international laws (e.g. Convention International Trade in Endangered Species of Wild Fauna and Flora (CITES): see UNEPWCMC (2006)). Legislated hunting seasons and details of permits and quotas for foreign hunters have been included where appropriate. For each species, the percentage of the Mongolian range occurring within protected areas has been estimated. The percentage of each species' range in Mongolia occurring within protected areas was calculated using ArcView 3.3 and ArcMap 9. In order to calculate a percentage for each species we subtracted the total size of the protected areas from the size of the primary distribution polygon (including both breeding and non-breeding areas). Within protected areas, species are conserved under Mongolian Laws of Protected Areas.

STATUS OF MONGOLIAN BIRDS

Of the 476 assessed native bird species of Mongolia, 10% were categorised as regionally threatened including Near Threatened. A further 0.6% were categorised as Critically Endangered (CR), 1.7% as Endangered (EN), 3.3% as Vulnerable (VU), and 4.4% as Near Threatened (NT). Almost 90% of Mongolian birds are categorised as Least Concern (LC) (excluding DD and NA). Just 30 species were categorised as Data Deficient (DD). A further 87 species were categorised as Not Applicable, as they did not meet the requirements for regional assessment (see notes on application of the guidelines) (Figure 2).

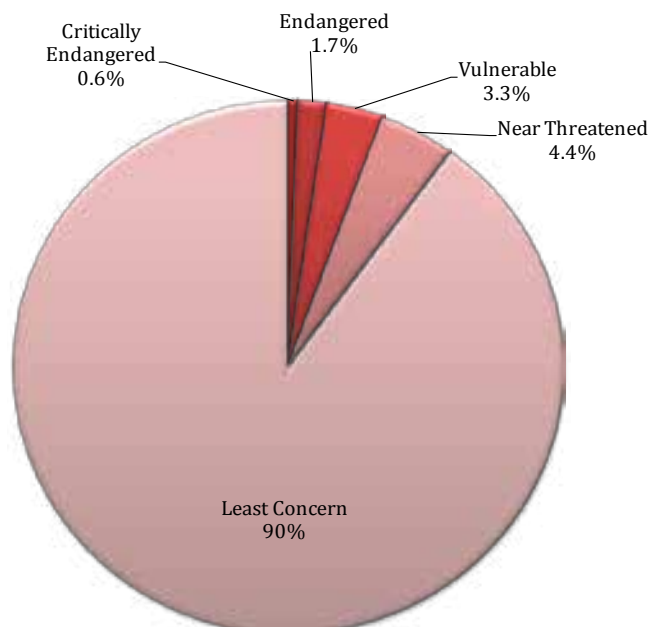


Figure 2. Regional conservation status of all species of birds (excluding DD and NA) according to the IUCN Red List Categories and Criteria

Threat status varies among different bird groups in Mongolia (Figure 3). All species of crane and pheasant are under significant threat of regional extinction. Water birds and raptors also fall under a high threat category in Mongolia. 11.4% of raptor species are categorized as Data Deficient (DD).

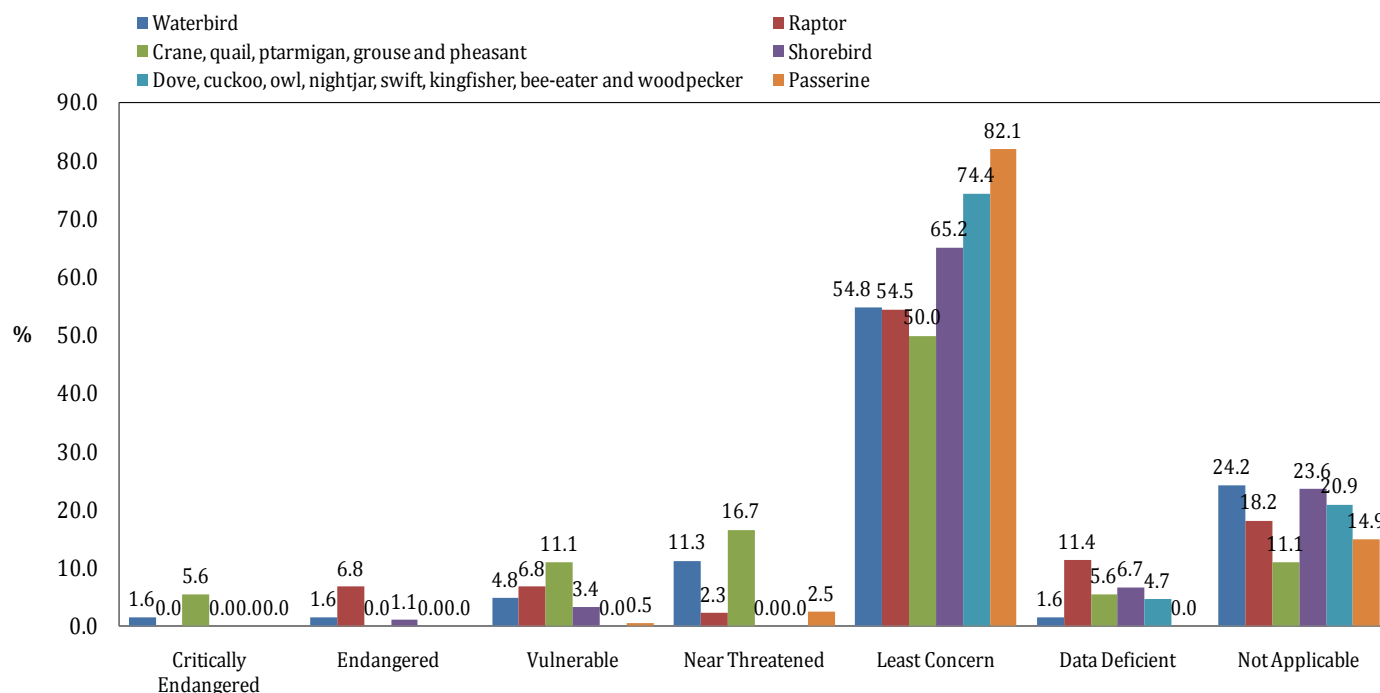


Figure 3. Comparison of status by bird groups in Mongolia

This result highlights the need for research on raptors in Mongolia. Of all passerines found in Mongolia, 82.1% are categorized as Least Concern. This shows that most of the passerines have not reached threat categories. The Tree Pipit, Reed Parrotbill, Saxaul Sparrow, White-throated Bushchat, Japanese Reed Bunting and Yellow-breasted Bunting, however, all fall within threat categories.

A total of 36 species of bird are regionally threatened (Critically Endangered, Endangered or Vulnerable) or Near Threatened in Mongolia. Of these, 2 species are categorized as Critically Endangered, 6 species as Endangered and 12 species as Vulnerable. Sixteen species are categorized as Near Threatened (Table 1). Globally threatened species include Dalmatian Pelican, Lesser White-fronted Goose, Swan Goose, White-headed Duck, Baikal Teal, Greater Spotted Eagle, Pallas’s Fish-eagle, Eastern Imperial Eagle, Saker Falcon, Siberian Crane, White-naped Crane, Hooded Crane, Great Bustard, Houbara Bustard, Relict Gull, White-winged Bushchat, and Yellow-breasted Bunting.

Table 2. Birds regionally threatened (Critically Endangered, Endangered, and Vulnerable) and Near Threatened in Mongolia

Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)	Near Threatened (NT)
Dalmatian Pelican <i>Pelecanus crispus</i>	White-headed Duck <i>Oxyura leucocephala</i>	Lesser White-fronted Goose <i>Anser erythropus</i>	Great Bittern <i>Botaurus stellaris</i>
Siberian Crane <i>Grus leucogeranus</i>	Relict Gull <i>Larus relictus</i>	Baikal Teal <i>Anas formosa</i>	Little Bittern <i>Ixobrychus minutus</i>
	Greater Spotted Eagle <i>Aquila clanga</i>	Ferruginous Duck <i>Aythya nyroca</i>	Purple Heron <i>Ardea purpurea</i>
	Pallas’s Fish-eagle <i>Haliaeetus leucoryphus</i>	Lammergeier <i>Gypaetus barbatus</i>	Greater White-fronted Goose <i>Anser albifrons</i>
	Short-toed Snake-eagle <i>Circaetus gallicus</i>	Eastern Imperial Eagle <i>Aquila heliaca</i>	Swan Goose <i>Anser cygnoides</i>
	Reed Parrotbill <i>Paradoxornis heudei</i>	Saker Falcon <i>Falco cherrug</i>	Mute Swan <i>Cygnus olor</i>
		White-naped Crane <i>Grus vipio</i>	Falcated Duck <i>Anas falcata</i>
		Hooded Crane <i>Grus monacha</i>	White-tailed Eagle <i>Haliaeetus albicilla</i>
		Asian Dowitcher <i>Limnodromus semipalmatus</i>	Altai Snowcock <i>Tetraogallus altaicus</i>
		Great Bustard <i>Otis tarda</i>	Common Pheasant <i>Phasianus colchicus</i>
		Houbara Bustard <i>Chlamydotis undulata</i>	Common Crane <i>Grus grus</i>
		Mongolian Ground-jay <i>Podoces hendersoni</i>	Tree Pipit <i>Anthus trivialis</i>
			White-throated Bushchat <i>Saxicola insignis</i>
			Saxaul Sparrow <i>Passer ammodendri</i>
			Yellow-breasted Bunting <i>Emberiza aureola</i>
			Ochre-rumped Bunting <i>Emberiza yessoensis</i>

DISTRIBUTION OF MONGOLIAN BIRDS

Mongolian bird species richness in the north is higher than in the south. High species richness of birds of Mongolia is recorded in the regions with forest steppe and river valleys. The species richness map shows that there is a trend that the richness decreases from north to south (Figure 4).

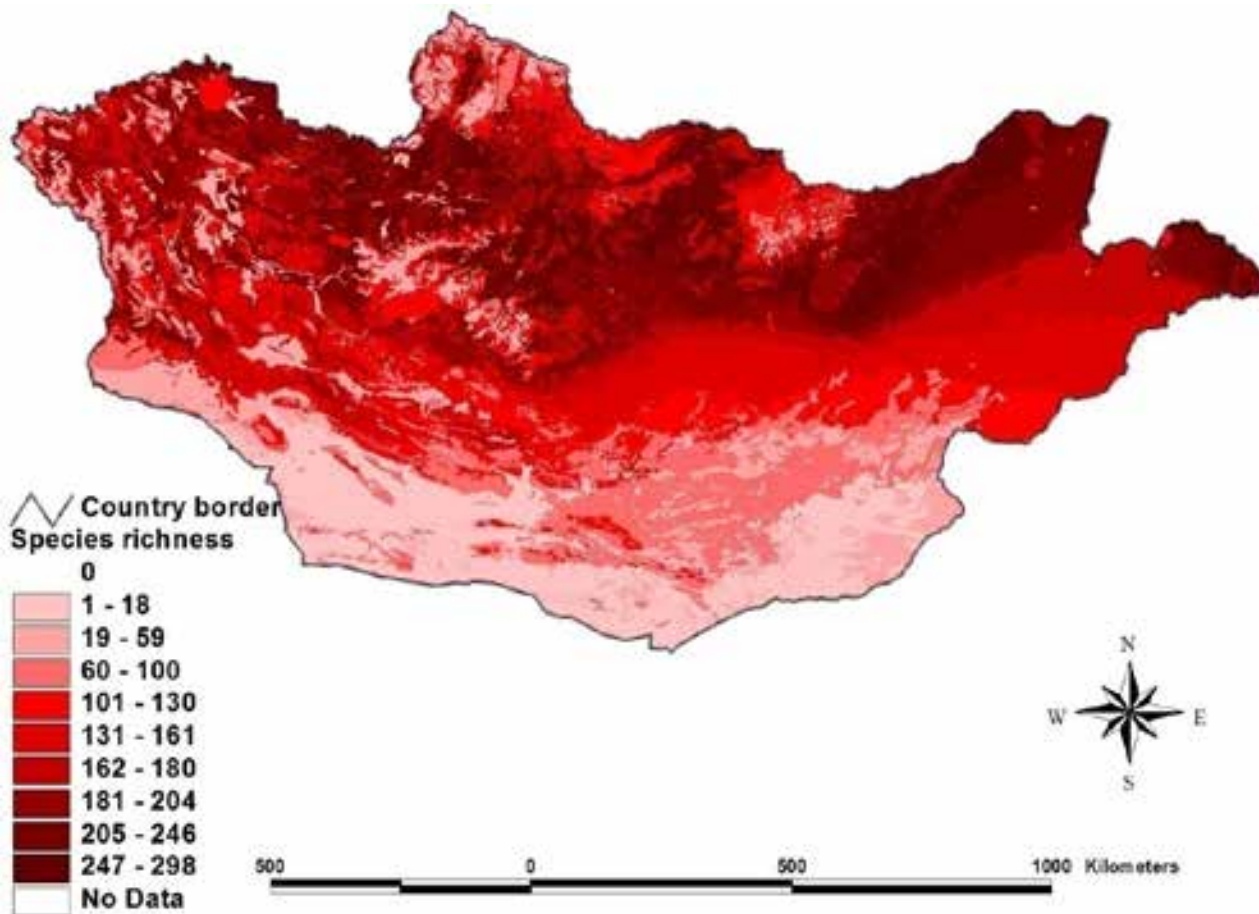


Figure 4. Species richness of birds in Mongolia. Darker colours represent areas with higher species richness.

High species richness for Mongolian birds is documented in the subdivisions such as Mongol Daguur, Eastern Mongolian Plain (particularly Buir lake and north-eastern part), Ikh Kyangan mountain range, Khangai mountain range, Great Lakes Depression and Hövsgöl mountain range (Darkhad Depression). Low species richness is recorded in the south particularly desert steppe and Gobi desert areas such as Northern Gobi, Eastern Gobi, Dzungar Gobi or Baruunkhurai depression and Alashani Gobi (Figure 5a) (see also Figure 1). Species richness is differed by protected areas of Mongolia (Figure 5b). High species richness of birds of Mongolia is occurred in the protected areas such as Nömrög, Altan Els and Mongol Daguur Strictly Protected Areas (SPA), Onon-Balj, Khustai, Högnökhaan, Otgontenger, Uvs, Khar-Us lake, and Tsambagarav national parks (NP), Toson Khulstai, Khar Yamaat, Ugtam, Bulgan, and Ikh Nart Nature Reserve (NR). Species richness is partly high in Dornod Mongol and Bogd Khaan SPAs, and Mönh Khaikhan, Tarvagatai, Khangain Nuruu, Hövsgöl, Tujiin Nars, Gorkhi-Terelj, and Khan-Höhii NPs. In order to establish new protected areas, significance for bird conservation should be considered in sudden areas such as Buir lake, Khalkh and Herlen river basins, some parts of Hentii and northern Khangai mountain range, and Orkhon, Selenge and Tuul river valleys (Figure 5b).

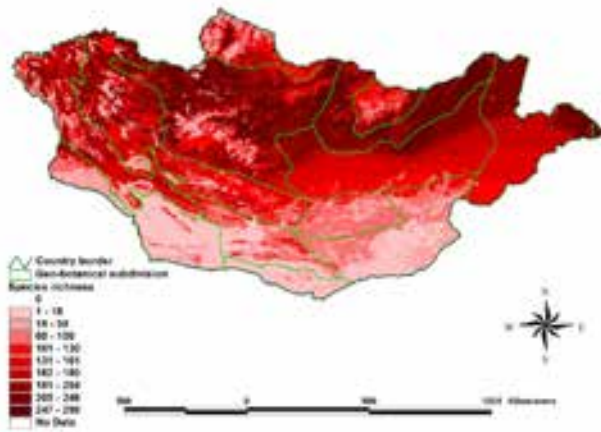


Figure 5a. Bird species richness and geo-botanical subdivision of Mongolia. Darker colours represent areas with higher species richness.

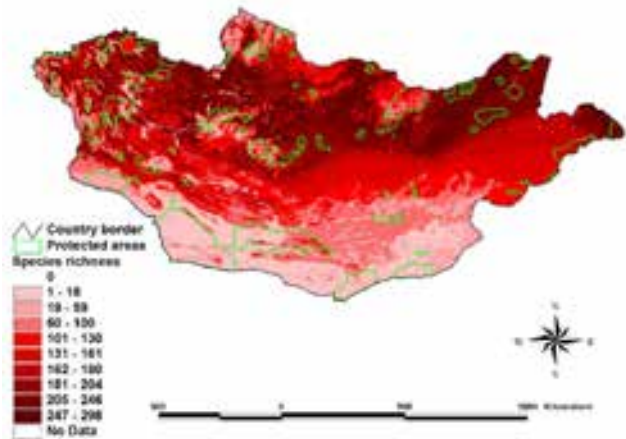


Figure 5b. Bird species richness and protected areas of Mongolia. Darker colours represent areas with higher species richness.

Political borders do not affect the bird distribution and richness of species. However, local administrative units such as sum and aimags or province have been playing an important role for bird conservation for the country. Therefore, we have showed the species richness in aimags (provinces) (Figure 6). High species richness has occurred in Dornod, Hentii, Töv, Bulgan, Uvs, Khovd and Zavkhan aimags, and S Hövsgöl, N Arkhangai, N Selenge, N Övörkhongai some parts of Bayankhongor and Gobi-Altai provinces. These aimags are located in the main migration flyways and routes of migratory birds for regional and global level. It means that the aimags should be strictly encouraged, developed and implemented conservation action plans for Mongolia birds (please see Summary Action Plans for Mongolian Birds).

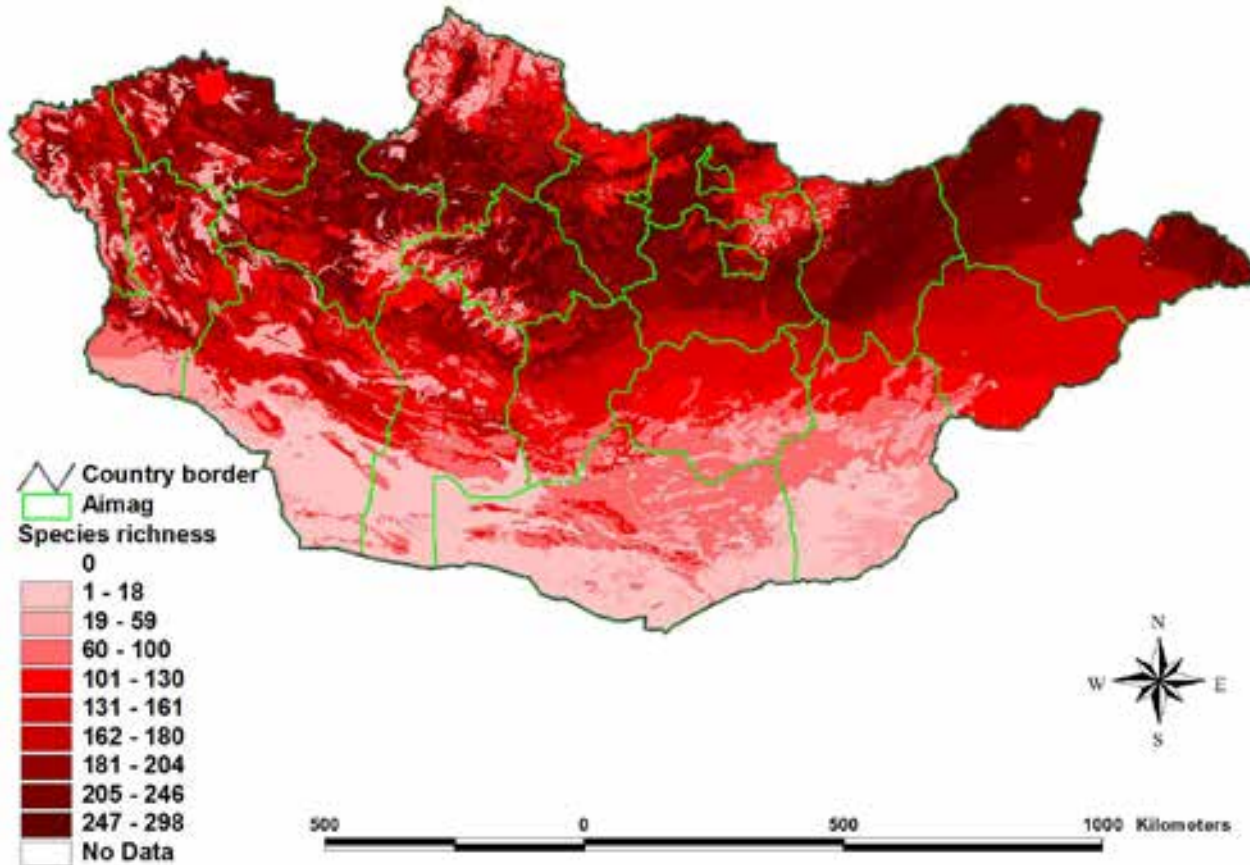


Figure 6. Bird species richness by aimags, or provinces in Mongolia. Darker colours represent areas with higher species richness.

Species richness of threatened species is high in Mongol Daguur, Ih Khyangan, Middle Khalkh Steppe, Great Lakes Depression, Baruunkhurai Depression, Gobi-Altai Mountain Range, and easter Gobi regions. Southwestern part of Mongolia, main range of Hentii and Khangai mountains, Hövsgöl Mountain range, and Gobi Desert areas have low numbers of threatened species. Eastern Mongolia, Great Lakes Valley and Baruunkhurai Depression are located in the junction of migratory -flyways and routes of migratory birds passing through Central Asian, West Asian, East Asian and Australasian Flyways (Figure 7, 7a-d).

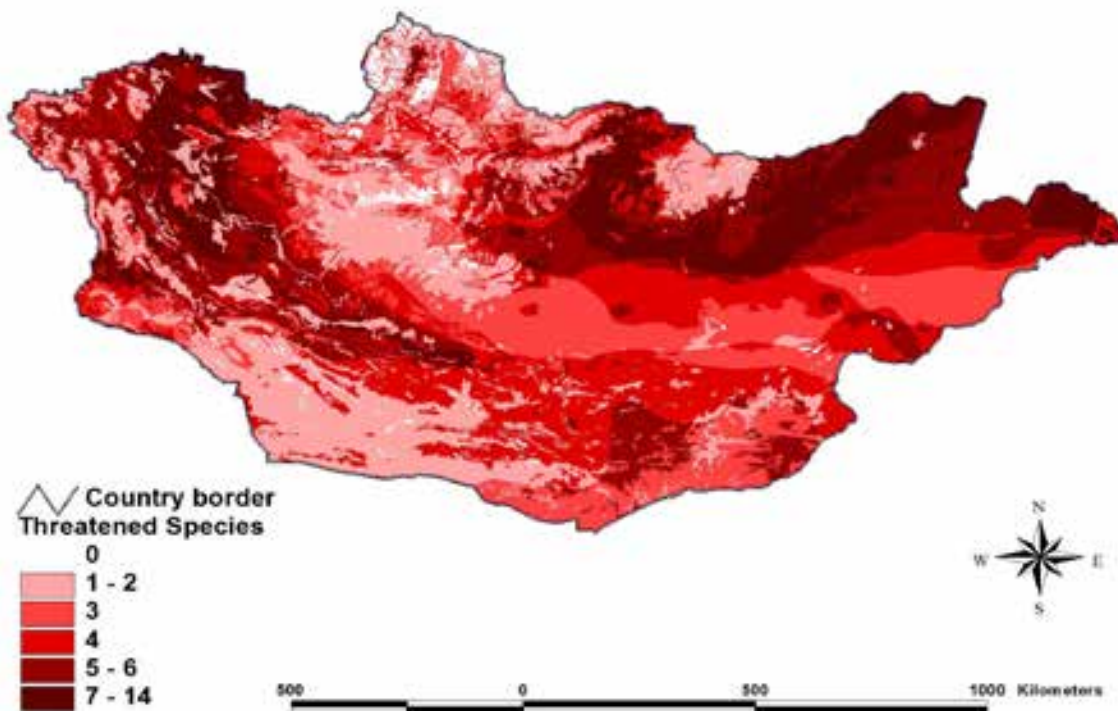


Figure 7. Threatened bird species richness of Mongolia. Darker colours represent areas with higher species richness.

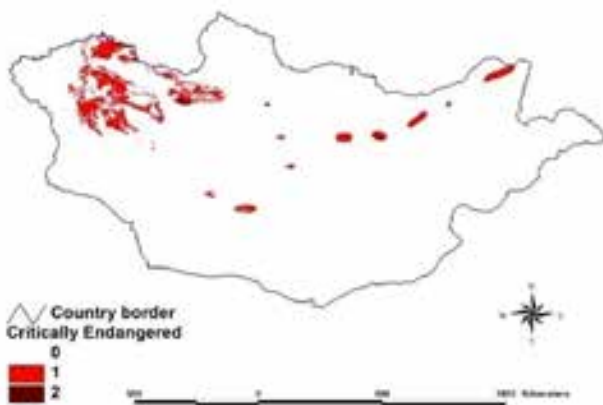


Figure 7a. Critically Endangered species richness of Mongolia. Darker colours represent areas with higher species richness.

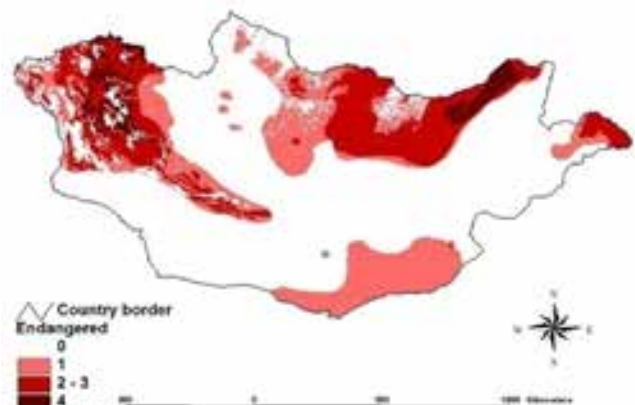


Figure 7b. Endangered species richness of Mongolia. Darker colours represent areas with higher species richness.

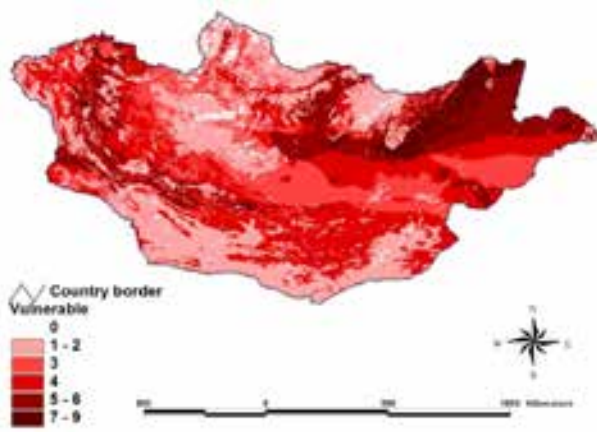


Figure 7c. Vulnerable species richness of Mongolia. Darker colours represent areas with higher species richness.

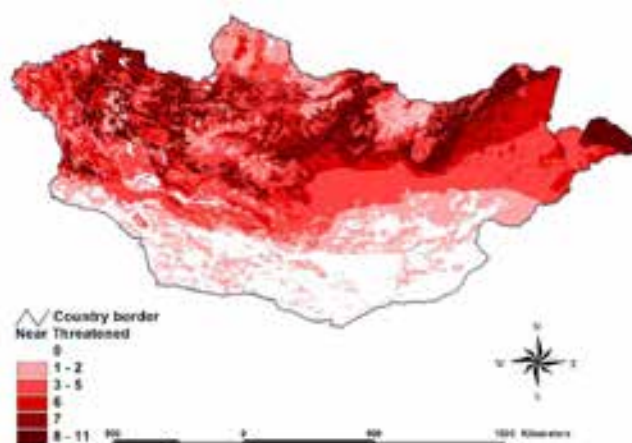


Figure 7d. Near Threatened species richness of Mongolia. Darker colours represent areas with higher species richness.

Most protected areas in eastern Mongolia and Great Lakes Depression, some protected areas in southern Mongolia and Central Mongolia have been playing the important role for conservation of threatened species (Figure 7e). As mentioned before, administrative border line does not affect the species richness of threatened species. However, conservation measures are taken by not only state governmental organizations but also local administrations in the country. Therefore, each aimag needs to know species richness of threatened species. Highest richness of threatened species has recorded in Dornod, Hentii, Töv, Selenge, Bulgan, Uvs, Khovd, Gobi-Altai, Ömnögobi and Dornogobi provinces. The aimags should be very careful with gold, oil and other mineral mining activities in the areas where threatened species gather (Figure 7f).

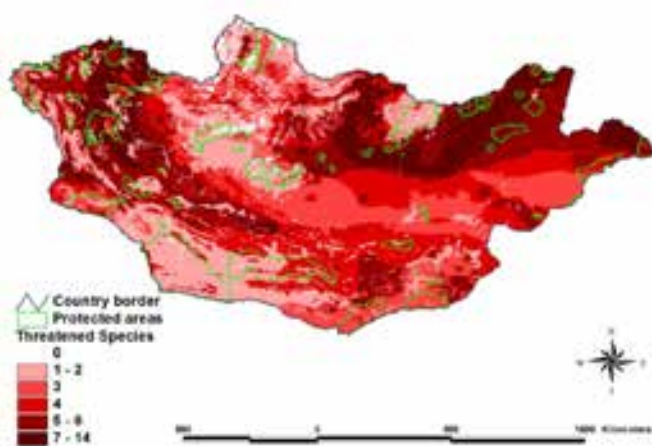


Figure 7e. Threatened species richness and protected areas of Mongolia. Darker colours represent areas with higher species richness.

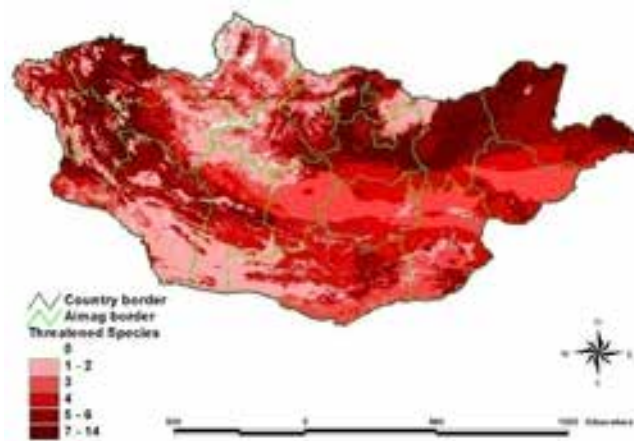


Figure 7f. Threatened species richness and aimags of Mongolia. Darker colours represent areas with higher species richness.

Data Deficient species' richness is high in the regions such as Khalkh river-Buir lake and Great Khyangan Mountain, Hövsgöl Mountain Range, Great Lakes Depression including Uvs lake Depression, Baruunkhurai or Dzungaryn Gobi and basins of Ulz, Herlen, Orkhon and Selenge rivers (Figure 8). High species richness' areas have contained high number of Data Deficient species (Figure 4 & 8). Gobi desert including of Northern, Eastern, Trans-Altai and Alashani Gobi, desert steppe and southern part of the steppe zone have lower richness of Data Deficient species (Figure 8). This shows that the areas with high species richness and high number of Data Deficient species within Mongolian need field surveys conducting on species composition, population size and density, breeding ecology, and population threats. Bird conservation activities need to be implemented.

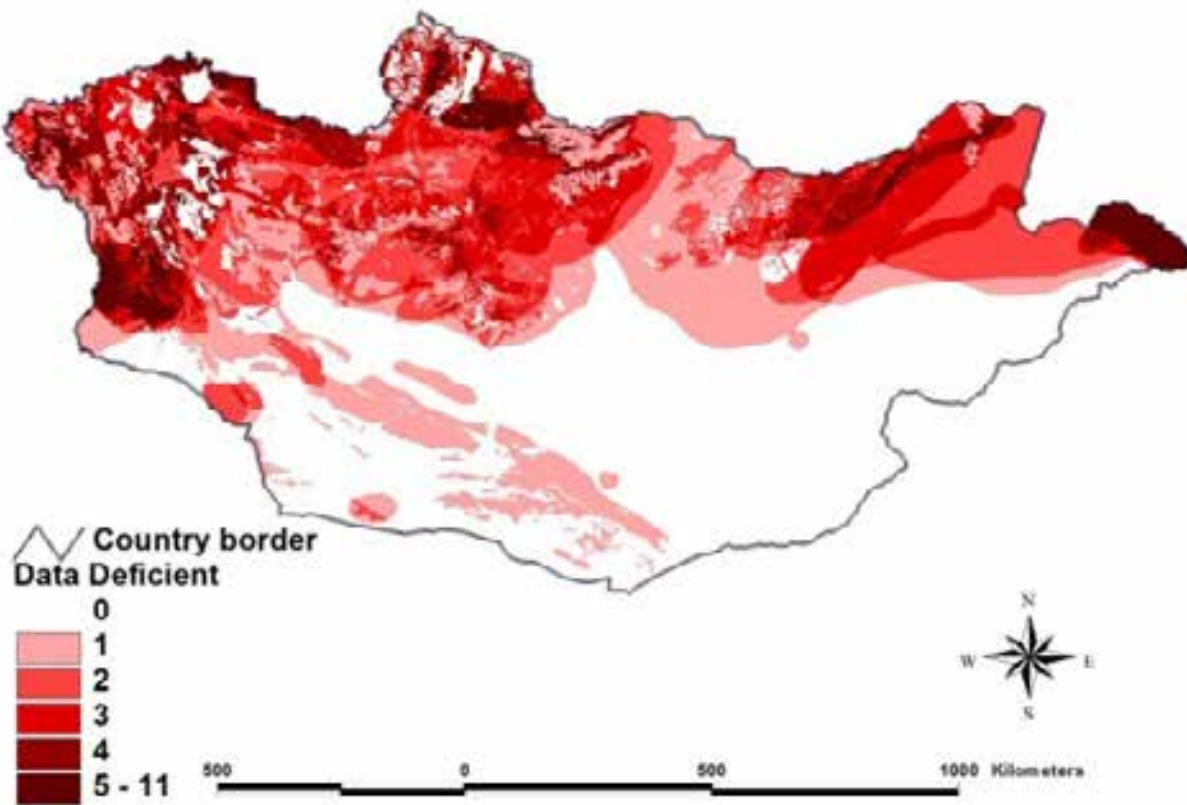


Figure 8. Data Deficient species richness of Mongolia. Darker colours represent areas with higher species richness.

POPULATION TRENDS OF MONGOLIAN BIRDS

During the workshop, experts assessed the population trends of 476 bird species in Mongolia by comparing the current population with that from 2000 (adopting the approach of Birdlife International (2011)). 64.9% of species were found to have a stable population, 31% were unknown, 4% had a decreasing population trend and 0.1% showed an increase in population size (Figure 9).

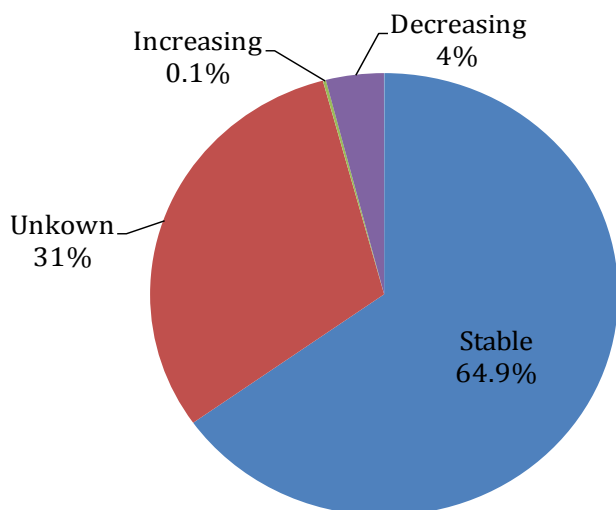


Figure 9. Population trends of Mongolian birds.

This assessment demonstrated that the majority of bird species in Mongolia have stable populations. However, the population of several species of birds seems to be declining rapidly due to drought, human impacts and environmental change. 31% of all species were classified as ‘unknown’. This indicates the continued need for population surveys of all species in the future (Figure 9).

THREATS TO MONGOLIAN BIRDS

Using the IUCN Red List categories of dominant threats, we have compared the threats and potential threats to all species of birds in Mongolia. 38.1% of species are threatened by habitat loss and degradation, 13.6% by human disturbance, 11% by pollution and 10.7% by changes in native species (Figure 10).

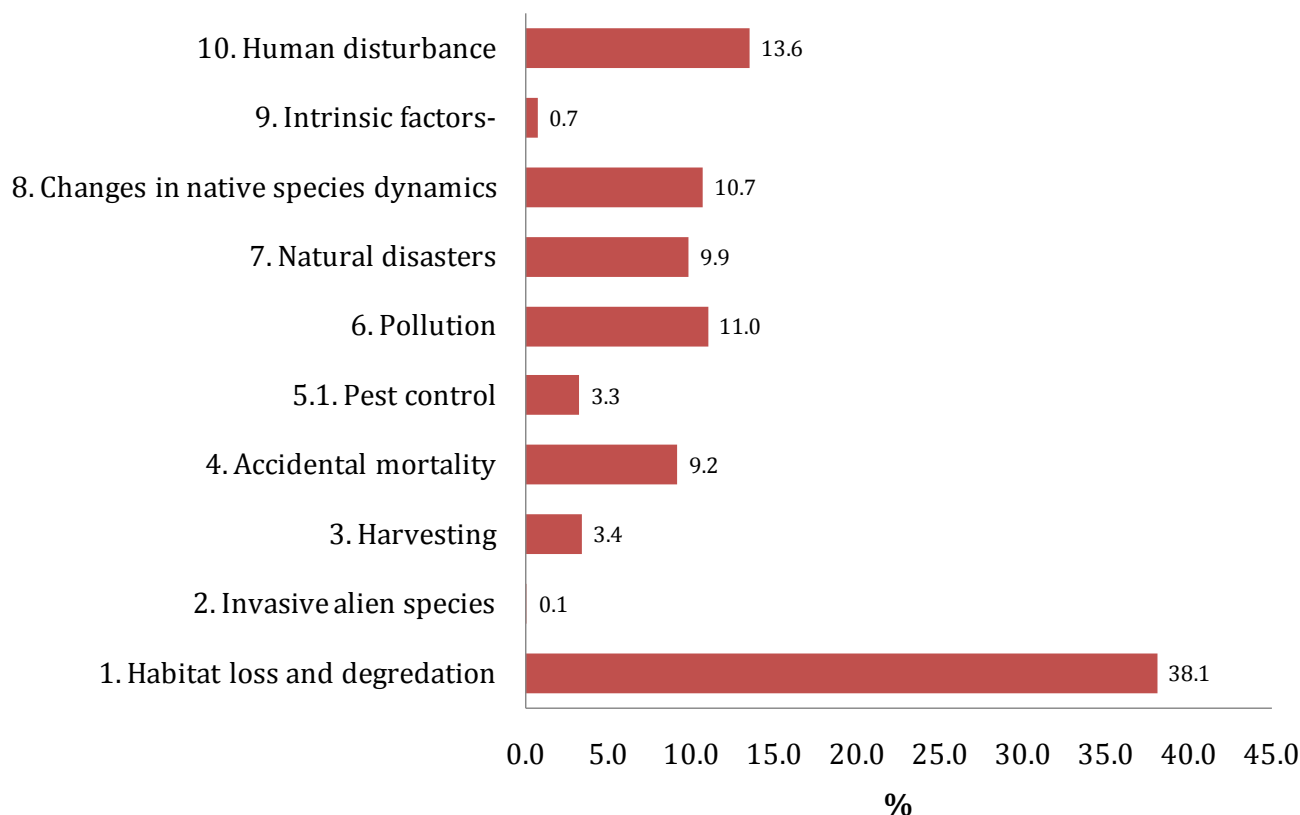


Figure 10. Comparison of dominant threats to the birds of Mongolia.

Bird conservation strategies and plans should focus on these threats. The combination of threats such as overgrazing and drought, changes in native species dynamics and human disturbance, are having significant impacts on both breeding and migrating bird populations in Mongolia.

The dominant threats vary among species groups (Figure 11 & 12). The greatest threats to habitat loss and degradation are mining (1.3.1.), human settlement (1.4.2.), tourism or recreation (1.4.3.) and fires (1.7.). Breeding, migrating and stop-over habitats have been significantly degraded over the last few years. Habitat degradation and loss have been intensified by combinations of threats in Mongolia (Figure 11). Subsistence use or local trade through cultural, scientific and leisure activities account for over half of the threats falling under the 'harvesting' category. The primary activity is that of poaching. Birds are commonly poached and stuffed for sale as souvenirs in public service areas and shops. The second greatest threat is that of subsistence use or local trade for Mongolian and Tibetan traditional medicine. Local people in Mongolia hunt species such as the Altai Snow-cock, Black Kite, Mongolian Ground-jay and others for the treatment of certain illnesses; however, such health benefits have not been scientifically proven (Figure 12).

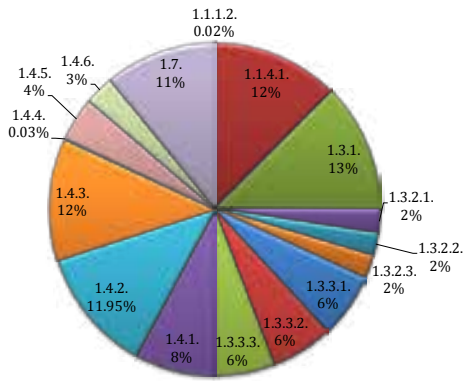


Figure 11. Dominant threat types of the habitat loss and degradation in Mongolia

- 1.1.1.2. Small-holder farming
- 1.1.4. Livestock -1.1.4.1. Nomadic
- 1.3.1. Mining
- 1.3.2. Fisheries -1.3.2.1. Subsistence
- 1.3.2. Fisheries -1.3.2.2. Artisanal or small-scale
- 1.3.2. Fisheries -1.3.2.3. Large-scale or industrial
- 1.3.3. Wood -1.3.3.1. Small-scale subsistence
- 1.3.3. Wood- 1.3.3.2. Selective logging
- 1.3.3. Wood- 1.3.3.3. Clear-cutting
- 1.4.1. Industry 1.4.2. Human settlement
- 1.4.3. Tourism and recreation 1.4.4. Transport - land
- 1.4.5. Transport - water 1.4.6. Dams 1.7. Fires

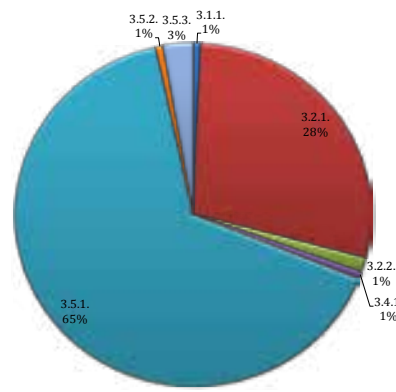


Figure 12. Dominant threat types of the Harvesting

- 3.1. Food -3.1.1. Subsistence use or local trade
- 3.2. Medicine- 3.2.1. Subsistence use or local trade
- 3.2. Medicine -3.2.2. Sub-national or national trade
- 3.4. Materials -3.4.1. Subsistence use or local trade
- 3.5. Cultural, scientific, leisure activities- 3.5.1. Subsistence use or local trade
- 3.5. Cultural, scientific, leisure activities- 3.5.2. Sub-national or national trade
- 3.5. Cultural, scientific, leisure activities- 3.5.3. Regional or international trade

Collision with various types of high power electric cables, illegal shooting and poisoning with insecticide and rodenticide are also threatening the birds of Mongolia. Entanglement with abandoned gill nets used for illegal and legal fishing is a potent threat to species of diving bird and shore feeders (Figure 13). Pollution such as atmospheric pollution caused by global warming, and domestic land pollution have been negatively affecting both breeding and non-breeding birds. Atmospheric and land pollution intensify the drought of breeding and non-breeding habitats of water birds and forest species (Figure 14).

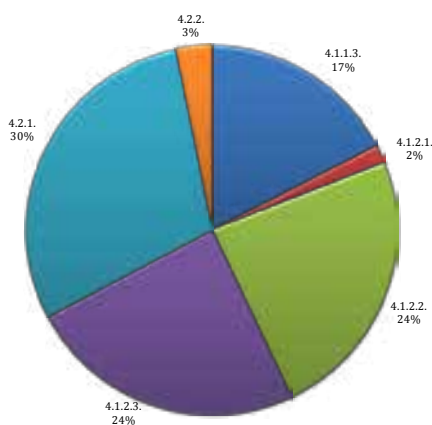


Figure 13. Dominant threat types of the Accidental mortality

- 4.1. By-catch- 4.1.1. Fisheries-related-4.1.1.3. Entanglement
- 4.1.2. Terrestrial- 4.1.2.1. Trapping, snaring or netting
- 4.1.2. Terrestrial- 4.1.2.2. Shooting
- 4.1.2. Terrestrial- 4.1.2.3. Poisoning
- 4.2. Collision- 4.2.1. Pylon and building collision
- 4.2. Collision -4.2.2. Vehicle collision

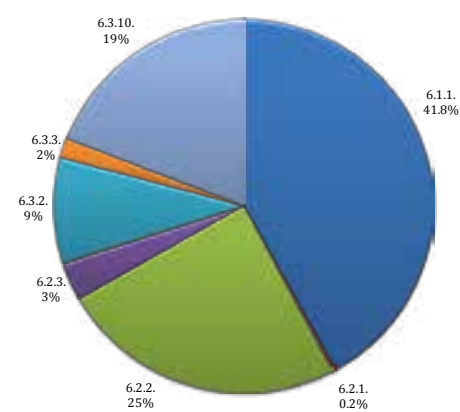


Figure 14. Dominant threat types of the Pollution

- 6.1. Atmospheric pollution -6.1.1. Global warming
- 6.2. Land pollution- 6.2.1. Agriculture
- 6.2. Land pollution- 6.2.2. Domestic
- 6.2. Land pollution- 6.2.3. Commercial or Industrial
- 6.3. Water pollution- 6.3.2. Domestic
- 6.3. Water pollution- 6.3.3. Commercial or Industrial
- 6.3. Water pollution- 6.3.10. Noise pollution

Drought associated with pollution and human activities is a threat to 51% of bird species in Mongolia. Storms, flooding and temperature extremes are a constant threat to breeding individuals during the early breeding period, and to migrating birds on spring and autumn migrations (Figure 15). Changes in native species dynamics also pose a threat to the birds of Mongolia. Threats relating to changes in predator numbers and prey / food are of great concern. Outbreak of highly pathogenic avian influenza is one of the worst threats to waterfowl, waders and some raptors (Figure 16).

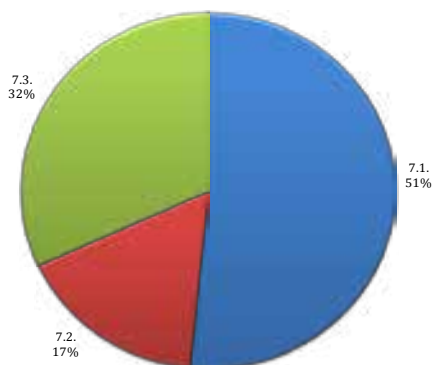


Figure 15. Dominant threat types of the Natural disasters

- 7.1. Drought
- 7.2. Storms or flooding
- 7.3. Temperature extremes

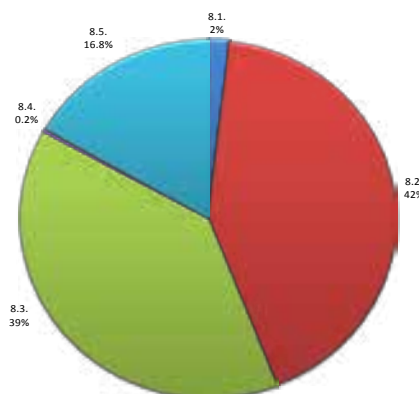


Figure 16. Dominant threat types of the Changes in native species dynamics

- 8.1. Competitors
- 8.2. Predators
- 8.3. Prey or food base
- 8.4. Hybridizers
- 8.5. Pathogens or parasites

When considering all threat categories, intrinsic factors do not have a major impact on all bird species in Mongolia. However, it should be noted that the impact of such a threat is critical to threatened species (Figure 17).

Human disturbance is one of the main threats to all species in the forms of recreation / tourism, transport and fire (Figure 18). Developments such as tourist resorts, mining and human settlements are dominant threats to breeding and non-breeding species. Autumn and spring steppe and forest fires burn breeding and non-breeding habitats, occasionally with eggs and young chicks in the nest.

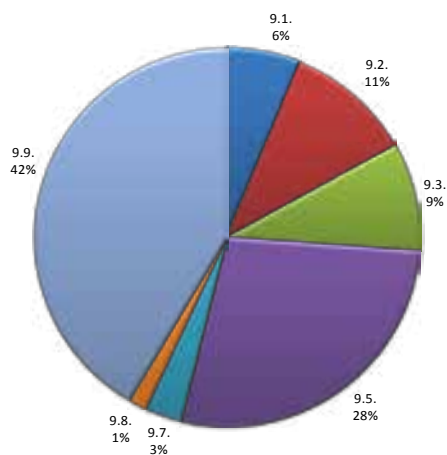


Figure 17. Dominant threat types of the intrinsic factors

- 9.1. Limited dispersal
- 9.2. Poor recruitment, reproduction
- 9.3. High juvenile mortality
- 9.5. Low densities
- 9.7. Slow growth rates
- 9.8. Population fluctuations
- 9.9. Restricted range

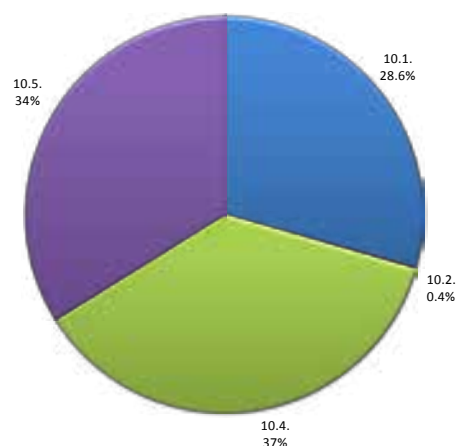


Figure 18. Dominant threat types of the human disturbance

- 10.1. Recreation and tourism
- 10.2. Research
- 10.4. Transport
- 10.5. Fire

Our assessment identified the main activities and the direct threats that cause the decline of species. We ranked direct threats as primary, secondary and tertiary levels for each species. Habitat loss and degradation, drought and fires caused by human activities were the principal primary threats (Table 3). These factors are seriously threatening to waterfowl and other wetland-dependent species such as Dalmatian Pelican (*Pelecanus crispus*), Siberian Crane (*Grus leucogeranus*), Pallas's Fish-eagle (*Haliaeetus leucoryphus*), Reed Parrotbill (*Paradoxornis heudei*), White-headed Duck (*Oxyura leucocephala*), Relict Gull (*Larus relictus*), Great Bittern (*Botaurus stellaris*), Little Bittern (*Ixobrychus minutus*), Purple Heron (*Ardea purpurea*) etc.

The primary threats to Altai Snowcock, Ring-necked Pheasant, and Dalmatian Pelican are poaching and cultural uses, such as medicinal uses of Altai Snow-cock and Ring-necked Pheasant and use of the Pelican bill as a race horse scraper. The secondary and tertiary threats are more varied among species; they include pollution, climate change, logging, tourism and recreation, etc.

Table 3. Summary of direct threats to Mongolian birds, as identified by compilers and participants of the Mongolian Biodiversity Databank Workshop in 2009. Primary threats are represented in black, secondary threats in grey, and tertiary threats in light grey.

Regional Status	Scientific name	1. Habitat Loss and Degradation (human-induced)						3. Harvesting (hunting and gathering)	4. Accidental mortality		5. Persecution	6. Pollution				7. Natural disasters		8. Changes in native species dynamics		9. Intrinsic factors		10. Human disturbance																		
		1.1.4. Livestock	1.3.1. Mining	1.3.2. Fisheries	1.3.3. Logging	1.4.2. Human settlement	1.4.3. Tourism and recreation	1.4.6. Dams	3.1. Food	3.2. Medicine		3.4. Materials	3.5. Cultural, scientific, and leisure activities	4.1.1.3. Entanglement with fishing line	4.1.2.1. Trapping and netting	4.1.2.2. Shooting	4.2. Collision	5.1. Pest control	6.1. Atmospheric pollution	6.1.1. Global warming	6.2. Land pollution	6.3. Water pollution	6.3.10. Noise pollution	7.1. Drought	7.2. Storms and flooding	7.3. Temperature extremes	8.1. Competitors	8.2. Predators	8.3. Prey and food base	8.5. Pathogens and parasites	9.2. Poor recruitment and reproduction	9.3. High juvenile mortality	9.5. Low densities	9.9. Restricted range	10.1. Recreation and tourism	10.4. Transport	10.5. Fire			
CR	<i>Pelecanus crispus</i>																																							
CR	<i>Grus leucogeranus</i>																																							
EN	<i>Circaetus gallicus</i>																																							
EN	<i>Haliaeetus leucoryphus</i>																																							
EN	<i>Paradoxornis heudei</i>																																							
EN	<i>Oxyura leucocephala</i>																																							
EN	<i>Larus relictus</i>																																							
EN	<i>Aquila clanga</i>																																							
VU	<i>Anser erythropus</i>																																							
VU	<i>Anas formosa</i>																																							
VU	<i>Aythya nyroca</i>																																							
VU	<i>Gypaetus barbatus</i>																																							
VU	<i>Chlamydotis undulata</i>																																							
VU	<i>Aquila heliaca</i>																																							
VU	<i>Otis tarda</i>																																							
VU	<i>Limnodromus semipalmatus</i>																																							
VU	<i>Falco cherrug</i>																																							
VU	<i>Grus vipio</i>																																							
VU	<i>Grus monacha</i>																																							
VU	<i>Podoces hendersoni</i>																																							
NT	<i>Botaurus stellaris</i>																																							
NT	<i>Ixobrychus minutus</i>																																							
NT	<i>Ardea purpurea</i>																																							
NT	<i>Anser albifrons</i>																																							
NT	<i>Anser cygnoides</i>																																							
NT	<i>Cygnus olor</i>																																							
NT	<i>Anas falcata</i>																																							
NT	<i>Haliaeetus albicilla</i>																																							
NT	<i>Tetraogallus altaicus</i>																																							
NT	<i>Phasianus colchicus</i>																																							
NT	<i>Grus grus</i>																																							
NT	<i>Anthus trivialis</i>																																							
NT	<i>Saxicola insignis</i>																																							
NT	<i>Passer ammodendri</i>																																							
NT	<i>Emberiza yessoensis</i>																																							
NT	<i>Emberiza aureola</i>																																							

SPECIES ACCOUNTS

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Tetraonidae

1. Scientific Name: *Bonasia bonasia*

Species Authority: (Linnaeus, 1758)

Common Names: Hazel Grouse or Hazel Hen (English), Shiver hötuu or hötuu (Mongolian)

Subspecies in Mongolia: *T. b. sibiricus*, *T. b. amurensis* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Synonyms: *Tetrastes bonasia* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock, forest fire and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Spain, France, Belgium, Norway, Luxembourg, Germany, Switzerland, Italy, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Russian Federation, Kazakhstan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Onon River valley and the country border through the Hentii Mountain Range, south to Bogd Uul massif; west to Tuul and Orkhon Rivers (Bureg Khangai Mountain Range) through Orkhon and Selenge Rivers to upper Delgermörön River to the state border; Mönh Khairkhan massif, Khujirt river, Tarvagatai Mountain and in Ih Khyangan (upper Nömrög River) (Kozlova, 1930; Bold, 1969; Bold, 1984; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005a; Tsevenmyadag *et al.*, 2005).

Population: The global population consists of 15,000,000 - 40,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia. The total individuals of the species in central Hentii Mountain forest was 88,500 individuals in 427,500 ha area (Bold, 1970).

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. This species nests on the ground underneath dense and tall forest vegetation and shrubby areas of coniferous and mixed forests (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). Female lays 6-10, sometimes 15 eggs of glossy, yellowish-buff colour with reddish-brown fine and sparse speckles and blotches. The female incubates the eggs alone for 20-21 days. The young can run just after hatching. The female leads young to graze in open, dry and short vegetated areas. The young can hide well if alarmed. They hide in

the first 2 weeks and do not attempt to take refuge in trees and bushes. They feather at 10-20 days and roost in trees like adults a c. 3 weeks and take c. 8 weeks to become full-grown. They feed on seeds and buds of various plants in forest. They also occur in wheat fields near forest where they forage wheat grains in late autumn and winter.

Habitat Type: 1. Forest (1.1. 1.4.); 3. Shrub-land (3.3., 3.4. near forest in winter).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have been directly and indirectly affecting the species.

1.3.3. Wood -1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging-1.3.3.3. Clear-cutting: This is a great threat to the species not only in forest but also in lake and river valleys with trees.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development and roads near the area where the species breeds and winters are major threats to the species.

1.7. Fires: Forest fires may burn nests containing eggs and chicks, and smoke is also an impact on the species.

3.1. Food-3.1.1 Subsistence use or local trade: Local people in forested areas shoot the species in autumn and winter for food.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

3.5. Cultural, scientific or leisure activities -3.5.3. Regional or international trade: National and international game bird hunting organizations shoot more birds than permitted on their license in Selenge province in 2007, 2008 and 2010 (Mr S.Tuvshin pers. comm.). This is one of the serious threats to the birds if it continues in future.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir. See 3.5.3.

4.1.2.3. Poisoning: Insecticides used against insects like Siberian Moth cause individual poisoning through the food chain and low breeding success of the species in breeding and non-breeding areas.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species) -6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters -7.1. Drought: Due to drought in the forest of taiga in Mongolia, birch and other trees have been dramatically drying out. This leads to changes in breeding and wintering habitats associated with vegetation degradation.

8. Changes in native species dynamics -8.2. Predators-8.3. Prey or food base: Carnivores such as Grey Wolf (*Canis lupus*) and Sable (*Martes zibellina*) in the region prey upon the flightless and slow-moving chicks and moulting individuals. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

10. Human disturbance -10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have been negatively affecting the individuals that breed and winter there.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 12.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Tetraonidae

2. Scientific Name: *Lyrurus tetrrix*

Species Authority: (Linnaeus, 1758)

Common Names: Black Grouse (English), Khar khur or khur (Mongolian)

Subspecies in Mongolia: *L. t. mongolicus*, *L. t. ussuriensis*, *L. t. baicalensis* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Synonyms: *Tetroa tetrrix* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock, forest fire and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

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Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Spain, United Kingdom, Faroe Islands, Korea, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Bosnia and Herzegovina, Slovakia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Estonia, Belarus, Russian Federation, Kazakhstan, Kyrgyzstan, China, Mongolia, It is regionally extinct in Croatia, Hungary, Turkey and is possibly regionally extinct in Montenegro and Serbia.

Regional Distribution: This species breeds at Yolt River (Mongol-Altai Mountain Range); isolated territories at the delta of Torkholig River (Northern Uvs Depression) and Khan Höhii; Tes River with coniferous and deciduous forests; the southern limit of the distribution of this area: Nömrög Mountain (north-western Telmen Lake); through forested areas of the Khangai Mountain Range to Orkhon and Selenge River. From these rivers to valleys of Orkhon and Tuul Rivers and Bogd Uul (Ulaanbaatar); south-eastern limit of territories: Herlen Bayan Ulaan Mountain (Middle Khalkh Steppe) and the eastern border through Onon, Balj River valleys and patchy forest of Ulz River; southernmost to Batkhaan and Högnökhaan; easternmost to Khalkh Gol valley (Ih Khyangan) (Kozlova, 1930 & 1932; Bold, 1969; Bold, 1970; Bold, 1973; Bold, 1984; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Mainjargal, 2001; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 15,000,000 - 40,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia. The population size in the Khangai Mountain is 250,000 individuals, and 250,000 individuals in Hentii Mountains (Bold, 1989; Mainjargal, 2005a).

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding pairs nest on the ground in dense vegetated areas mixed with shrubs and bushes in coniferous, deciduous and mixed forest (Bold, 1989; Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Mainjargal, 2005a; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding season continues from March to August. By April, males actively display in open areas near forest. The female lays 6-10 (5-16) eggs of glossy, creamy buffish yellow colour with buffish brown to reddish-brown blotches and small spots by early June. The female incubates the eggs alone for 23-28

days and broods the chicks. Males play no part in the nesting. Chicks stay close together and feed under tall and dense grasses and bushes, and fly at a month. They feed on seeds, soft and green parts of plants, roots, buds, and insects and worms in the breeding season. Autumn diet of the species in the Hentii Mountain region consists of leaves of *Geranium* spp. (70%), *Ranunculus* spp. (27%), *Poa* spp. (1%), and remains of insects and spiders (1%). Predominant species in the diet of the species in Selenge region was *Fagopyrum* spp. (65%), wheat grain (27%), bud of *Betula* spp. (2%) (Mainjargal, 2005a). They remain together and join with large flocks in winter. Large flocks consisting of more than 100 individuals stay in river valleys and lakes down to forest edge and feed on wintering buds and seeds. Large congregated flocks are often seen in wheat fields in winter.

Habitat Type: 1. Forest (1.1. 1.4.); 3. Shrub-land (3.3., 3.4. near forest); 11. Artificial – Terrestrial (11.3. wheat fields).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.3.3. Wood -1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging-1.3.3.3. Clear-cutting: This is a great threat to the species, not only in forest but also in lake and river valleys with trees.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development and roads near the area where the species breeds and winters are major threats to the species.

1.7. Fires: Forest fires may burn nests containing eggs and chicks, and smoke is also an impact on the species.

3.1. Food -3.1.1 Subsistence use or local trade: Local people in forested areas shoot the species in autumn and winter for food.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

3.5.3. Regional or international trade: National and international game bird hunting organizations shoot more birds than permitted on their license in Selenge province in 2007 and 2008 (Mr S.Tuvshin pers. comm.). This is one of the greatest threats to the species, if it continues.

4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Insecticides used against insects like Siberian Moth cause individual poisoning through the food chain and low breeding success of the species in breeding and non-breeding areas.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Due to drought in the forest of taiga in Mongolia, birch and other trees have been dramatically drying out. This leads to changes in breeding and wintering habitats associated with vegetation degradation.

8. Changes in native species dynamics-8.2. Predators-8.3. Prey or food base: Carnivores such as Grey Wolf (*Canis lupus*) and Sable (*Martes zibellina*) in the region prey upon the flightless and slow-moving chicks and moulting individuals. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

10. Human disturbance-10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding site have been negatively affecting the individuals that breed and winter there.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 10.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Tetraonidae

3. Scientific Name: *Tetrao urogallus*

Species Authority: Linnaeus, 1758

Common Names: Western Capercaillie or Capercaillie (English), Egel soir or erdiin soir (Mongolian)

Subspecies in Mongolia: *T. u. taczanowskii* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia. It is also connected with its limited occurrence and unknown population. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Spain, United Kingdom, France, Andorra, Norway, Germany, Switzerland, Italy, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Russian Federation, Kazakhstan, China, It is extinct regionally in Ireland and is possibly extinct regionally in Portugal.

Regional Distribution: Mongolian-Russian biological complex expedition members found this species for the first time in deciduous forest at Alagtsar River valley of Hövsgöl Lake (SE Hövsgöl) in 1981 (Sumiya & Skryabin, 1989). It has also been recorded at Eastern Sayan (northern Hövsgöl), Bayan Uul, Khoridol Saridag, Tag Mountain, and Uur River (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Boldbaatar, 2005a; Mainjargal, 2005a). Breeding record has not been confirmed yet.

Population: The global population consists of 5,000,000-10,000,000 mature individuals. Global breeding and resident ranges are estimated at 11,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it may be a resident breeder. There is no scientific proof for its breeding in the areas where it has been recorded. There are only a few records in Hövsgöl areas. However, some individuals were seen in Khonin nuga, West Hentii in the breeding season (R.Samiya pers. comm.). It is found in coniferous forest in the mountain range of northern part of the country. The Western Capercaillie is adapted to its original habitats - old coniferous forests with a rich interior structure and dense ground vegetation under a light canopy. According to Madge & McGowan (2002), the Western Capercaillie lives on a variety of food types, including buds, leaves, berries, insects, grasses and in the winter mostly conifer needles. It is a highly specialized herbivore, feeding almost exclusively on blueberry leaves and berries along with some grass seeds and fresh shoots of sedges in summertime. The young chicks are dependent on protein-rich food in their first weeks and thus mainly prey on insects. Available insect supply is strongly influenced by weather - dry and warm conditions allow fast growth of the chicks, cold and rainy weather leads to high mortality among them. The hens are ground breeders and spend the night on the nest. As long as the young chicks cannot fly the hen spends the night with them in dense cover on the ground. During winter the hens rarely go down to the ground and most tracks in the snow are from cocks.

Habitat Type: 1. Forest (1.1. 1.4.); 3. Shrub-land (3.3., 3.4. near forest).

Dominant Threats: Potential dominant threats follow;

(please see also Black-billed Capercaillie's dominant threats).

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic; 1.3. Extraction-1.3.1. Mining; 1.3.3. Wood-1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging-1.3.3.3. Clear-cutting; 1.4. Infrastructure development-1.4.2. Human settlement, 1.4.3. Tourism and recreation; 1.7. Fires.

3.1. Food (3.1.1 Subsistence use or local trade) -3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade, 3.5.3. Regional or international trade.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting- 4.1.2.3. Poisoning.

5. Persecution -5.1. Pest control.

6. Pollution -6.1.1. Global warming, 6.2. Land pollution -6.2.2. Domestic.

7. Natural disasters -7.1. Drought.

8. Changes in native species dynamics -8.2. Predators, 8.3. Prey or food base.

10. Human disturbance -10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Approximately 19.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Tetraonidae

4. Scientific Name: *Tetrao parvirostris*

Species Authority: Bonaparte, 1856

Common Names: Black-billed Capercaillie, or Spotted Capercaillie (English), Nurgyn soir (Mongolian)

Subspecies in Mongolia: *T. p. parvirostris*, *T. p. stegmanni*, (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock, forest fire and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, China, Mongolia.

Regional Distribution: This species breeds at Tes River and at the country border (western limit of distribution); from western Bulnai through Uliastai, northern slopes of the Khangai Mountain Range; from Buregkhangai (Khangai), from the upper Orkhon Rivers east to Tuul and Orkhon Rivers; from Kharaa River to the Hentii Mountain Range; from the upper Herlen to Onon River and the country border, and south Bogd Uul massif. Isolated populations exist at Khan Höhii and Kharkhira Mountains (Kozlova, 1930; Tarasov, 1962; Bold, 1969; Bold, 1970; Bold, 1977; Stepanyan, 1975; Bold, 1984; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005a; Tseveenmyadag *et al.*, 2005; Nyambayar & Tseveenmyadag, 2009).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia. A total of 2,625 individuals were counted in 525,000 ha of pine forest in Hentii Mountain of Mongolia (Bold, 1970).

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from April to August. Breeding pairs nest on the ground with dense vegetation with mountain forest shrubs and bushes in coniferous and mixed forest (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female lays 6-9 eggs of pale yellowish-buff colour with fine speckling and more small blotches of yellowish brown and reddish-brown. The female incubates the eggs alone for 26-31 days. Hatchlings leave the nest a day after hatching and find their own food. The wings are feathered in c. 2 weeks and they can then fly weakly. They remain in family groups, joining with larger flocks in autumn. They feed on seeds, needle leaves, buds, dried fruits, and insects in summer and mostly seeds, wintering buds and wheat grains in winter. Large flocks move down to river valleys and wheat fields near deciduous forest in winter.

Habitat Type: 1. Forest (1.1. 1.4.); 3. Shrub-land (3.3., 3.4. near forest); 11. Artificial – Terrestrial (11.3. wheat fields).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have been directly and indirectly affecting the species.

1.3.3. Wood-1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging-1.3.3.3. Clear-cutting: This is a great threat to the species not only in forest but also in lake and river valleys with trees.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development and roads near the area where the species breeds and winters are major threats to the species.

1.7. Fires: Forest fires may burn nests containing eggs and chicks, and smoke is also an impact on the species.

3.1. Food -3.1.1 Subsistence use or local trade: Local people in forested areas shoot the species in autumn and winter for food.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

3.5.3. Regional or international trade: National and international game bird hunting organizations shoot more birds than permitted on their license in Selenge province in 2007 and 2008 (Mr S.Tuvshin pers. comm.). This is one of the greatest threats to the species, if it continues.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Insecticides used against insects like Siberian Moth cause individual poisoning through the food chain and low breeding success of the species in breeding and non-breeding areas.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species) -6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters -7.1. Drought: Due to drought in the forest of taiga in Mongolia, birch and other trees have been dramatically drying out. This leads to changes in breeding and wintering habitats associated with vegetation degradation.

8. Changes in native species dynamics -8.2. Predators-8.3. Prey or food base: Carnivores such as Grey Wolf (*Canis lupus*) and Sable (*Martes zibellina*) in the region prey upon the flightless and slow-moving chicks and moulting individuals. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

10. Human disturbance -10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have been negatively affecting the individuals that breed and winter there.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Tetraonidae

5. Scientific Name: *Lagopus lagopus*

Species Authority: (Linnaeus, 1758)

Common Names: Willow Ptarmigan, Willow Grouse or Red Grouse (English), Tsagaan akhuuna or tsagaan yatuu (Mongolian)

Subspecies in Mongolia: *L. l. brevirostris*, *L. l. kozlowae* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Spain, United Kingdom, Faroe Islands, Korea, Democratic People's Republic of, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Bosnia and Herzegovina, Slovakia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Estonia, Belarus, Russian Federation, Kazakhstan, Kyrgyzstan, China, Mongolia, It is regionally extinct in Croatia, Hungary, Turkey and is possibly regionally extinct in Montenegro and Serbia.

Regional Distribution: This species breeds at Tavan Bogd, Siilhem, Altan Höhii, Tsast, Tsambagarav, Höh Serh, Tsengel Khairkhan, Mönh Khairkhan, and Baatar Khairkhan (Mongol-Altai Mountain Range); from Otgontenger to Orkhon River (Central Khangai); Khanhöhii, Tarvagatai, Bulnai (north Khangai); Ulaantaiga, Khoridol Saridag, Bayan uul, and Uur River (Hövsgöl region); Ih and Baga Hentii Mountains. It is known to display altitudinal movement in winter (Kozlova, 1930; Bold, 1969; Bold, 1970; Bold, 1973; Bold, 1984; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 40,000,000 mature individuals. Global breeding and resident ranges are estimated at 24,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. This species nests on the ground with alpine meadow vegetation, scattered shrubs and low bushes in the sub-alpine zone (Sumiya&Skryabin, 1989; Bold *et al.*, 2005; Gombobaatar, 2012). Breeding begins in late May-early June. Female lays 6-11, rarely 4-17 eggs of glossy, yellowish, and sometimes slightly reddish colour with dark chocolate brown to reddish-brown heavy mottles and blotches. The female incubates the eggs alone for 20-28 days. Males remain near the nest. Just after hatching, the female leads chicks away and leaves the nest. The male helps guard the chicks and female during this time. Chicks find their own food. They eat seeds, green parts of plants, roots, buds, shoots, fruits, insects and worms. Wing feathers grow very quickly while they are still young. They fly at 12-13 days. Families remain together until late autumn and may group with others to form winter flocks. In winter, they form flocks regularly, moving down to lowlands of high mountains and feeding on seeds and wintering buds in thin snow areas. When the snow is thin, they move up to mountain tops and remain there until breeding season begins.

Habitat Type: 1. Forest (1.4. near alpine zone); 3. Shrub-land (3.4. in alpine and subalpine meadows); 6. Rocky areas.

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species. Some breeding pairs desert their nest site with eggs.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near the area where the species breeds are major threats to the species.

1.7. Fires: Fires burn the breeding habitats and nests, and smoke is also an impact on the species.

3. Harvesting (hunting or gathering) -3.2. Medicine-3.2.1. Subsistence use or local trade: Local people and monks use fresh blood and meat for the traditional medicine for treating disease and illness. However, there is no scientific proof for this use.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places. Some Kazakh people in western Mongolia shoot the species and hang dried skin on the wall of their house.

4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.2 and 3.5.

6. Pollution (affecting habitat and species)

6.1.1. Global warming/oceanic warming-6.2. Land pollution -6.2.2. Domestic: Global warming and Domestic land pollution are potential threats causing low breeding success of the species, associated with habitat change (Boldbaatar, 2005).

7. Natural disasters- 7.1. Drought: See 6.1.1.

7.2. Storms or flooding-7.3. Temperature extremes: In early spring, eggs and downy young chicks overcool from coldness, heavy rain and strong storms.

8. Changes in native species dynamics- 8.2. Predators-8.3. Prey or food base: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. Eurasian Eagle-owls, Golden and Steppe Eagles prey upon both adults and chicks.

10. Human disturbance- 10.1. Recreation and tourism: Breeding pairs have been disappearing from historical breeding sites due to construction of tourist camps near the sites.

10.4. Transport: Transport of cars near tourist camps and busy roads have been negatively affecting the individuals that nest near the roads.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 13.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Tetraonidae

6. Scientific Name: *Lagopus muta*

Species Authority: (Montin, 1776)

Common Names: Rock Ptarmigan or Ptarmigan (English), Tsevdgiin akhuuna or Tsevdgiin tsagaan yatau (Mongolian)

Subspecies in Mongolia: *L. m. nadezdae*, *L. m. macrorhynchus* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Synonyms: *Lagopus mutus* Montin, 1776

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Greenland, Iceland, Spain, United Kingdom, Faroe Islands, France, Andorra, Norway, Germany, Switzerland, Italy, Liechtenstein, Austria, Svalbard and Jan Mayen, Sweden, Slovenia, Finland, Russian Federation, Kazakhstan, Tajikistan, China, Mongolia, Japan.

Regional Distribution: This species breeds at Tavan Bogd, Siilhem, and Turgen Mountains of more than 2,200 m asl (Mongol-Altai Mountain Range); the alpine zone of Mongol-Altai (Yolt River valley) and Mönkh Khairkhan massif; Khan Höhii, Tarvagatai, Bulnai (Northern Khangai); Ulaantaiga, Khoridol Saridag, Bayan uul (Hövsgöl region); recorded 45 miles N Ulaanbaatar. Altitudinal movement has been recorded in winter (Kozlova, 1932; Bold, 1984; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005a).

Population: The global population consists of 8,000,000 mature individuals. Global breeding and resident ranges are estimated at 14,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding pairs nest on the ground in wet meadows with scattered shrubs and small rocks in the alpine and sub-alpine zones (Sumiya & Skryabin, 1989; Gombobaatar, 2012). Breeding begins in late May-early June. Female lays 5-10, occasionally 3-12 eggs of glossy pale ground and darker markings than Willow Grouse. The female incubates alone the eggs for 24-26 days. The male remains near the nest and guards the female and chicks. Chicks find their own food. They eat seeds, green parts of green plants, roots, buds, shoots, fruits, insects and worms as does Willow Grouse. Wing feathers grow very quickly while they are still small. They fly at c. 10 days. After the chicks fly, the male leaves the family and joins with unmated males. The female and young remain together, joining with others, later to form winter flocks. The flocks move down to low parts of breeding areas with thin snow cover and feed on seeds and wintering buds there.

Habitat Type: 1. Forest (1.4. near alpine zone); 3. Shrub-land (3.4. in alpine and subalpine meadows); 6. Rocky areas.

Dominant Threats: 1. Habitat Loss and Degradation(human-induced)- 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development and roads near the area where the species breeds and winters are major threats to the species.

1.7. Fires: Forest and steppe fires burn the breeding habitats and nests, and smoke is also an impact on the species.

3. Harvesting (hunting or gathering)- 3.2. Medicine-3.2.1. Subsistence use or local trade: Local people and monks use fresh blood and meat for the traditional medicine for treating disease and illness. However, there is no scientific proof for this use.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places. Some Kazakh people in western Mongolia shoot the species and hang dried skin on the wall of their house.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.2 and 3.5.

6. Pollution (affecting habitat and species) -6.1.1. Global warming -6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success of the species, associated with habitat change.

7. Natural disasters -7.1. Drought: See 6.1.1.

7.2. Storms or flooding-7.3. Temperature extremes: In early spring, eggs and downy young chicks overcool from coldness, heavy rain and strong storms.

8. Changes in native species dynamics -8.2. Predators-8.3. Prey or food base: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. Eurasian Eagle-owls, Golden and Steppe Eagles prey upon both adults and chicks.

10. Human disturbance -10.1. Recreation and tourism: Breeding pairs and wintering birds have been disappearing from historical sites due to construction of tourist camps and roads near the sites.

10.4. Transport: Busy roads have been negatively affecting individuals that nest and winter near the roads.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 13.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Phasianidae

7. Scientific Name: *Tetraogallus altaicus*

Species Authority: (Gebler, 1836)

Common Names: Altai Snowcock or Altai Snow Partridge (English), Altain khoilog (Mongolian)

Subspecies in Mongolia: *T. a. altaicus* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss, poaching, predation and degradation. This species is likely to be upgraded to a threat category in the near future. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Kazakhstan, China, Mongolia.

Regional Distribution: This species breeds at southern Siilhem and Turgen Mountain, south to all high mountains; Altan Höhii, Tsast Uul, Baatar Khaikhan, Sair Khaikhan (Tolbo Lake), Khovd Mountain (Khongoryn nuruu), upper Khovd River, Mönh Khaikhan massif; from Bulgan Rivers to the lower part (Khaaz mountain); east to Khasgt Khaikhan, Gichgene Range (Mongol-Altai Mountain Range); Ih Bogd, Baga Bogd, Aj Bogd, Nemegt, Sevree, Gurvansaikhan Mountains to its south eastern end (Gobi-Altai); Atas Bogd, Khavtag, Tsagaan Bogd (Trans-Altai Gobi); Jargalant Khaikhan (Great Lakes Depression); eastern Khan Höhii east to the Khangai Mountain Range; from Uliastai to the upper Orkhon and Suvarga Khaikhan; north-western Uliastai, Origo Mountain; Khoridol Saridag and Ulaan taiga in Hövsgöl. It is found in mountains in the Trans Altai, and Alashani Gobi during altitudinal movements (Berezovskii, 1881; Przewalskii, 1883; Bianki, 1898; Polyakov, 1912; Tugarinov, 1916; Bianki, 1915; Kozlova, 1930&1932; Sushkin, 1938; Gagina, 1960; Tarasov, 1960; Shagdarsuren, 1961; Dementiev, 1962; Dementiev & Bold, 1963; Bold, 1965; Bold, 1972a & 1973; Bold *et al.*, 1976; Namnandorj, 1976; Polyakov, 1912 *et al.*, 1982; Golovushkin, 1986; Zorig, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005a; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 50,000-100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia. However, P.K.Kozlov (1909) found up to 20 birds in Dundsai Khan Mountain, Ömnögobi province in July (Kozlova, 1930). Sushkin (1938) found 30 birds in Mongol-Altai. It is a common bird in Khangai and Gobi-Altai mountain ranges (Kozlova, 1930). Before the 1930-1940's this species was a common bird in high mountains of Khangai, Mongol and Gobi-Altai Mountains (Zorig, 1989). Since the 1950s, population numbers have swiftly declined due to legal hunting licensed by Mongolian Government. In 1953, this species was listed as a rare bird in Mongolia and hunting was completely prohibited. Since this time, number had again increased and it has become fairly common in the area (Bold, 1972). Bunchin (1972) estimated that 100-300 individuals per 100 ha were in Taishir, Höh Serh, Khasagtkhairkhan, Khar Azarga, and Gichgene mountains. According to Bold's (1972) estimate, density varied from 3 to 30 individuals depending on habitat and breeding success. According to Zorig (1989), a total of 700 birds were observed in Mongol-Altai and Gobi-Altai mountain ranges.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a resident breeder. By late April–mid-May, female and male become active for breeding. Breeding pairs nest on the ground well-sheltered by rocks at mountain slopes with rocks, gravels, small boulders, and low shrubs in high mountain alpine meadows (Bold, 1972a; Bunchin, 1972; Sumiya & Skryabin, 1989; Zorig, 1989) in high mountains at altitudes between 2,100-3,500 m asl and rarely at elevations of 3,700 m. By late April, size of testicles of males increase to 23-30 mm. On 13 May, ovary of female has more than 20 ovocytes, each the same size as a full grown egg. On 17 May, female birds have eggs in ovary (Zorig, 1989). The female lays 5-10, occasionally 20 eggs of glossy, pale-greenish or pale-bluish colour with reddish-brown blotches and sparse spots and other markings (Bold, 1972; Bunchin, 1972; Zorig, 1989). The female incubates the eggs alone for a month and broods the chicks alone. Males do not help to incubate the eggs or rear the chicks. When chicks hatch, family ascends to higher altitudes. Young grow slowly and are full-grown by mid-October. They graze on alpine and subalpine meadows, slopes, and mountain tops and feed on roots, flowers, buds, seeds, and other parts of green plants in summer. In winter, they prefer to eat seeds, wintering buds, leaves and other soft and juicy parts of such species as onion. Zorig (1989) did not find any insects and remains of animals in their diet. However, Bold (1972a) found worms, insects and their larvae in the diet of breeding birds. They remain together and broods combine into larger winter flocks. According to Zorig (1989), autumn moult starts by end of July and completes by October depending on weather

conditions. Flocks descend from the breeding areas when snow cover reaches more than 20 cm and low temperatures prevail.

Habitat Type: 3. Shrub-land (3.4. during seasonal movements); 6. Rocky areas.

Dominant threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought.

3.1. Food-3.1.1 Subsistence use or local trade: Local people shoot this species in winter for its meat. In 1951, a total of 2,172 birds were shot by hunters of the Gobi-Altai province. This represented 7.6 thousand kilograms of meat, approximately equal to 152 adult sheep (Bold, 1972; Zorig, 1989).

3.2. Medicine-3.2.1. Subsistence use or local trade-3.2.2. Sub-national or national trade: Local people shoot this species for its meat. From ancient time, people have been using the meat for treating illness and injuries.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are occasionally collected and stuffed for display.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir. See 3.5.3.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species) -6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters -7.1. Drought: Due to drought, snow cover on mountaintops (mountain glacier) has been melting and drying out for last few years. This leads to changes in breeding and wintering habitats associated with vegetation degradation.

7.2. Storms or flooding-7.3. Temperature extremes: These are dominant threats to the species, especially eggs and young chicks (Zorig, 1989).

8. Changes in native species dynamics -8.2. Predators-8.3. Prey or food base: Carnivores such as Golden Eagle, Northern Goshawk, Snow Leopard (*Uncia uncia*), Eurasian Lynx (*Lynx lynx*), and Grey Wolf (*Canis lupus*) prey upon adult birds and chicks in breeding and wintering periods. Badger (*Meles meles*), Rock Martin (*Martes foina*) in the region also prey upon eggs and flightless chicks (Bold, 1972). An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

8.5. Pathogens or parasites: Cestodes and ascarides were found in stomach and intestine of the three birds that collected at Erdenetsogt sum of Bayankhongor province in December.

9. Intrinsic factors-9.2. Poor recruitment, reproduction, or regeneration-9.3. High juvenile mortality-9.9. Restricted range: High mortality of juveniles and poor reproduction rate are a cause of a decline of numbers in short period in Mongolia (Zorig, 1989).

10. Human disturbance -10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have negatively affected the individuals that breed and winter there.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1953. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 17.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Phasianidae

8. Scientific Name: *Alectoris chukar*

Species Authority: (Gray, 1830)

Common Names: Chukar or Chukar Partridge (English), Ereenkhavirga khakhilag or Khakhilag (Mongolian)

Subspecies in Mongolia: *A. c. potanini*, *A. c. dzungarica* (see Howard & Moore (1994), Madge & McGowan (2002), Filippo *et al.* (2008) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Portugal, Spain, Saint Helena, France, Norway, Germany, Italy, South Africa, Greece, the Former Yugoslav Republic of Macedonia, Ukraine, Bulgaria, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, New Zealand.

Regional Distribution: This species breeds at Kharkhiraa and Turgen Mountains, Uureg and Achit Lakes (Mongol-Altai Mountain Range); throughout Mönh Khairkhan Mountain; across the Gobi-Altai Mountain Ranges to the south-eastern end of Hurh Mountain; all mountains and massif at Great Lakes Depression and Desert Steppe Depression of Zavkhan- Jargalant Khairkhan to the eastern border; surrounding areas of Khar Lake; southern mountains of Sharga Gobi; southern Khangai and Zavkhan River east to Ushgiin Nuruu; from Baruunkhurai-Baitag Bogd, Ih Khavtagiin Nuruu, Takhiin Shar Nuruu east to all mountains (Atas Bogd, Tsagaan Bogd) of the Trans-Altai Gobi; from Delgerkhangai east to Galbyn Uul (Khan Bogd, Ömnögobi province) (North Gobi) (Kozlova, 1930; Tungalag, 1983; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Filippo *et al.*, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 2,000,000 - 10,000,000 mature individuals. Global breeding and resident ranges are estimated at 10,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. They inhabit rocky open country with tall bushes and shrubs at high mountains. Breeding season continues from April to July. Breeding pairs nest on the ground near/under rocks, bushes and shrubs in rocky mountains (Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The female lays 8-15 eggs of glossy, pale yellowish, buff or brown colour with light red sprinkling, often heavily marked. Single-brooded. On some occasions, some females produce two clutches for one year. Mostly the female incubates the eggs for 22-25 days. A separate additional clutch may be incubated by the male. After the chicks hatch, the parent care and brood them. The young remain together and join with others into large groups in autumn. They feed on seeds, roots, flowers, buds, and other parts of green plants. Large flocks move down to hillside in harsh winters and ascend in summer. Habitat Type: 3. Shrub-land (3.4. during seasonal movements); 6. Rocky areas.

Dominant threats: 1. Habitat Loss and Degradation (human-induced) -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought. 1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats to the species.

3.1. Food-3.1.1 Subsistence use or local trade: Local people shoot this species in autumn and winter for its meat.

3.2. Medicine-3.2.1. Subsistence use or local trade-3.2.2. Sub-national or national trade: Local people shoot this species for its meat. From ancient times, people have been using the meat for treating some illnesses.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are occasionally collected and stuffed for display.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir. See 3.5.3.

6. Pollution (affecting habitat and species) -6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters -7.1. Drought: The drought leads to changes in breeding and wintering habitats associated with vegetation degradation.

7.2. Storms or flooding-7.3. Temperature extremes: These are dominant threats to the species, especially eggs and young chicks.

8. Changes in native species dynamics -8.2. Predators-8.3. Prey or food base: Carnivores such as Golden Eagle, Northern Goshawk, Snow Leopard (*Uncia uncia*), Eurasian Lynx (*Lynx lynx*), and Grey Wolf (*Canis lupus*) prey upon adult birds and chicks in breeding and wintering periods. Eurasian Badger (*Meles meles*) and Rock Martin (*Martes foina*) in the region also prey upon eggs and flightless chicks

10. Human disturbance -10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have negatively affected the individuals that breed and winter there.

Conservation Measures: Approximately 12.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Phasianidae

9. Scientific Name: *Perdix dauurica*

Species Authority: (Pallas, 1811)

Common Names: Daurian Partridge (English), Daguur yatuu or daguurn yatuu (Mongolian)

Subspecies in Mongolia: *P. d. dauurica*, *P. d. suschkini* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, China, Mongolia, Philippines.

Regional Distribution: This species breeds in Mongol-Altai and Gobi-Altai (at elevations less than 2,000 m asl, except for low vegetated slopes without bush); Great Lakes Depression (surrounding mountains); Khangai, Hentii, Hövsgöl Mountain Range (less than 3,000 m asl, except for deep taiga forest and wetlands); Middle Khalkh Steppe and the Eastern Mongolia Plain (except for short vegetated dry plains and hills absent of bushes, and dry Caragana bushed areas); Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes, Dzungariin Gobi, Trans-Altai Gobi, Northern Gobi, Eastern Gobi Depression (except for arid desert steppe, sand dunes, high altitudes, mountain valleys with short vegetation and an absence of bush and scrub). Altitudinal movement occurs in winter (Kozlova, 1930; Bold, 1969; Bold, 1970; Bold, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008).

Population: The global population is unknown. Global breeding and resident ranges unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. They descend to valleys and ascend to high altitude areas in summer. Breeding season continues from April to July. Breeding pairs nest on the ground with tall vegetation, dense shrubs and bushes on rocky slopes and hillsides, narrow dried river beds in forest steppe, mountain steppe, steppe, desert steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Nest is a shallow hollow, usually sheltered by taller plants, and lined with dead grasses and leaves. Female lays 8-15, sometimes 20-25 eggs of glossy, uniform shades of buff, brown or olive, occasionally with tiny dark spots. The female incubates the eggs alone for 22-28 days. The male remains near the nest. Young hatch within a short period and leave the nest on the first day. They are tended and brooded by both parents. They grow quickly. Wing feathers appear at 5-7 days. They fly at 16-18 days. The broods remain together next spring. Their favourite foods are seeds, roots, flowers, buds, juicy leaves and other parts of green plants. In winter, they prefer to remain near wheat fields and eat wheat grain. Cold winter they descend to local herders' winter camps and pick seeds from cattle dung.

Habitat Type: 3. Shrub-land (3.4. during seasonal movements); 6. Rocky areas.

Dominant threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats to the species.

1.7. Fires: Steppe fires may burn nests with eggs and young broods.

3.1. Food-3.1.1 Subsistence use or local trade: Local people shoot this species in autumn and winter for its meat.

3.2. Medicine-3.2.1. Subsistence use or local trade-3.2.2. Sub-national or national trade: Local people shoot this species for its meat. From ancient times, herders have been using the meat for treating illnesses.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are occasionally collected and stuffed for display.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to make a stuffed souvenir or make soup shoot it. See 3.5.3.

6. Pollution (affecting habitat and species) -6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters -7.1. Drought: The drought leads to changes in breeding and wintering habitats associated with vegetation degradation.

7.2. Storms or flooding-7.3. Temperature extremes: These are dominant threats to the species, especially eggs and young chicks.

8. Changes in native species dynamics -8.2. Predators-8.3. Prey or food base: Carnivores such as Golden Eagle, Northern Goshawk, Saker Falcon (Gombobaatar, 2006), Golden and Steppe Eagles, Snow Leopard (*Uncia uncia*), Eurasian Lynx (*Lynx lynx*), Grey Wolf (*Canis lupus*) and Red Fox (*Vulpes vulpes*) prey upon adult birds and chicks in breeding and wintering periods. Eurasian Badger (*Meles meles*), Steppe Polecat (*Mustela eversmanni*) and Pallas's Cat (*Otocolobus manul*) also eat eggs and flightless chicks.

10. Human disturbance -10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have negatively affected the individuals that breed and winter there.

Conservation Measures: Approximately 10.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Phasianidae

10. Scientific Name: *Coturnix coturnix*

Species Authority: (Linnaeus, 1758)

Common Names: Common Quail or Quail (English), Egel bödnö or budnee (Mongolian)

Subspecies in Mongolia: *C. c. coturnix* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is very limited. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola,

Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Republic of, Lesotho, Russian Federation, Rwanda, Tanzania, United Republic of, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar.

Regional Distribution: This species nests in tall vegetated areas in river valleys and lakes at Kharaa, Selenge and Orkhon Rivers, and Aчит Lake (the delta of Böhmörön River) (Kozlova, 1930; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005a; Tseveenmyadag *et al.*, 2005). E.V.Kozlova and P.P.Sushkin recorded in these areas. A.Bold and Russian ornithologists searched for its nest and found only Japanese Quail at these areas in 1983. It was found in Uyench, and Bodonch River valleys of Khovd province in 2008 (N. Tseveenmyadag pers. comm.). A single individual was recorded 20 km east of the Dulaankhaan bridge in Yeröö River basin (Stenzel *et al.*, 2005).

Population: The global population consists of 35,000,000 - 300,000,000 mature individuals. Global breeding and resident ranges are estimated at 21,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. This species inhabits tall vegetated dry and wet areas and meadows in lake and river valleys in forest steppe, steppe and mountain steppe. According to Kozlova (1930) and Sushkin (1938), they arrive in the breeding sites by late April-early May. Breeding begins in late May-early June. However, there is no scientific proof for its breeding within Mongolia. They nest on the ground. The nest is a shallow hollow made by the female, with a scanty lining of grass and nearby plant materials. The female lays 7-12 or 6-18 eggs of glossy, whitish or creamy-yellow to yellow, variably marked and heavily patterned with speckling, larger spots or blotches of chocolate brown, and light reddish-brown. The female incubates the eggs alone for 16-22 days. Within few hours after hatching, new hatchlings leave the nest and are brooded by the female. They fly at 19 days. They feed on seeds, buds, roots, leaves and other green parts, insects and worms in summer and seeds, dried fruit, buds, and wheat grain in autumn. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 3. Shrub-land (3.4. during seasonal movements); 6. Rocky areas.

3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (5.4. on migration); 11. Artificial – Terrestrial (11.3. on migration).

Dominant threats: Potential dominant threats follow;

(please, see also Japanese Quail's threats).

1. Habitat Loss and Degradation (human-induced) -1.1.4. Livestock-1.1.4.1. Nomadic, 1.3. Extraction-1.3.1. Mining, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation, 1.7. Fires; 4. Accidental mortality -4.1.2. Terrestrial-4.1.2.3. Poisoning; 5. Persecution -5.1. Pest control; 6. Pollution -6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic; 7. Natural disasters -7.1. Drought, 7.2. Storms or flooding-7.3. Temperature extremes; 8. Changes in native species dynamics -8.2. Predators, 8.3. Prey or food base; 10. Human disturbance -10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Approximately 3.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Phasianidae

11. Scientific Name: *Coturnix japonica*

Species Authority: Temminck & Schlegel, 1849

Common Names: Japanese Quail (English), Naran bödnö or naran budnee (Mongolian)

Global Status: Near Threatened

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: United States, Russian Federation, India, China, Mongolia, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Herlen-Ulz River valleys, from Ulz River valley through the upper Onon and Herlen River (Möngönmorit area) and south to the southern Hentii Mountain Range (by edges of taiga forest) through Tuul and Kharaa River valleys and north to the state border; from the state border through Orkhon River valley, Khangai Mountain Range and down to Tuul and all-Selenge River valleys; north to Hövsgöl Lake and through eastern Hövsgöl to the country border. Its eastern distribution includes Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga, Galdastai Rivers and Buir, and Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930; Bold, 1984; Bold, 1969; Fomin & Bold, 1991; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005a; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005). It migrates through Eastern Mongolian Plain, Middle Khalkh Steppe, and the Northern and Eastern Gobi (Dawaa *et al.*, 1994). One individual was seen in Darkhan Uul at Darkhan sum of Hentii province on 14 November, 2003 and feathers of two individuals were found in wintering Saker prey remains in Mongolia. These show that it might be wintering in Mongolia (Gombobaatar, 2006).

Population: The global population is unknown. Its population is decreasing in the World. This species may have undergone a decline of over 80% between 1973 and 2002. Declines also appear to have occurred in Laos (Duckworth, 2009), and although reliable population data is lacking, the species is suspected to have undergone a decline of 20-29% over the past 10 years (three generations) (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and wintering species. This species inhabits tall vegetated dry mountain valley, edge of wetlands, meadows, and river valleys and lakes in mountain, forest steppe, mountain steppe, and steppe. Migrants arrive in the breeding sites by late April-early May. Breeding begins in late May-early June. They nest on the ground in tall vegetated areas in river valleys and mountain slopes with tall grass near large rivers, lakes, and mountain valleys and forest edges with shrubs and scrub (Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow made by the female, with a scanty lining of dry grasses. The female lays 8-17, occasionally 22 eggs of glossy, whitish or creamy-yellow to yellow colour with chocolate brownish, and light reddish-brown heavy spots or blotches. The female incubates the eggs for 15-23 days. Hatchlings follow the female after a few hours. The female broods the young chicks. They fly at 16-21 days. This

species feeds on seeds, buds, roots, leaves and other green parts of plants, insects and worms in summer and seeds, dried fruit, buds, and wheat grain in autumn and winter. They remain together until they independently fly. Most individuals leave the breeding site for wintering grounds by late August–mid-September, depending on breeding success and food. Very few birds winter in Mongolia along river valleys with tall vegetated rocky and dense bushy areas. One individual was seen in Darkhan uul, Darkhan sum, on 14 November 2003 and feathers of two individuals were found in wintering Saker prey remains in Mongolia. These show that it might be wintering in Mongolia (Gombobaatar, 2006).

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (5.4. on migration); 11. Artificial – Terrestrial (11.3. on migration).

Dominant threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats to the species.

1.7. Fires: Steppe fires may burn nests with eggs and young broods.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.3. Poisoning: Insecticides used against insects like Siberian Moth cause individual poisoning through the food chain and low breeding success of the species both breeding and non-breeding sites.

4.2. Collision -4.2.1. Pylon and building collision: Accidental mortalities by collision. Collided birds are very occasionally found underneath 15 KV power poles in Central Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution-5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: The drought leads to changes in breeding and wintering habitats associated with vegetation degradation.

7.2. Storms or flooding-7.3. Temperature extremes: These are dominant threats to the species, especially eggs and young chicks.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Golden Eagle, Northern Goshawk, Saker Falcon, Eurasian Hobby, Golden and Steppe Eagles, Grey Wolf (*Canis lupus*) and Red Fox (*Vulpes vulpes*) prey upon adult birds and chicks in breeding and autumn periods. Eurasian Badger (*Meles meles*), Steppe Polecat (*Mustela eversmanni*) and Pallas's Cat (*Otocolobus manul*) also eat eggs and flightless chicks. This is one of the easy prey species for breeding Sakers in Mongolia (Gombobaatar, 2006).

10. Human disturbance- 10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have negatively affected the individuals that breed and winter there.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 5.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Galliformes

Family: Phasianidae

12. Scientific Name: *Phasianus colchicus*

Species Authority: (Linnaeus, 1758)

Common Names: Common Pheasant, Ring-necked Pheasant or Kobdo Pheasant (English), Zerleg gurguul or gurguul (Mongolian)

Subspecies in Mongolia: *P. c. hagenbecki* (western population), *P. c. pallasi* (eastern population) (see Howard & Moore (1994); Madge & McGowan (2002); Hennache & Ottaviani (2006) for further details)

Taxonomical Notes: According to Hennache & Ottaviani (2006), Eznii gol and Sogoo Lake in China where located near oases of Naran Bulag, Ehiin Gol and Tooroin Shand in Mongolia are potential sites for different subspecies, *Phasianus colchicus edzinensis*.

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. The number of breeding pairs in western Mongolia has been decreasing over the last four years due to drought and overgrazing. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Cuba, Bahamas, Puerto Rico, Morocco, Ireland, Portugal, Spain, Algeria, Saint Helena, United Kingdom, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Belarus, Turkey, Moldova, Russian Federation, Cyprus, Lebanon, Georgia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Tajikistan, Kyrgyzstan, China, Mongolia, Myanmar, Australia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan, New Zealand.

Regional Distribution: There are two isolated populations belonging to two, or possibly three different subspecies in the eastern and western parts of the country. It breeds at Khovd River (Nariin River, Shiveet, Shaazgai Aral, Ih Aral, Arlyn Surguuli, Sharguu, Temeen Khashaa Övöljöö, Shine Aral, Shar Aral, Shar Guu, Bor Mod Aral, Shine Övöljöö, Olgoi, Baga Aral, Tuukh Aral, Tsagaan Tokhoi, Buljim Aral, Ih Tuimert, Gakhait Aral, Möög, Oltrig Aral)- from Ölgii town through southern Khar-Us Lake to Zereg Depression (Zereg sum); Achit Lake (delta of Böhmörön River) and the delta of Tes and Torkholig Rivers. In the eastern region of the country it breeds in the river valley of Nömrög, Degee, Altan, Khalkh, Guu, Azarga, Shine, Emgentei, Huiten, Vaaran, Uizen, Torkho, Hengereg, and Avdrant Rivers (Khalkh River valley through Ih Khyangan), southwest to the Chinese border (Kozlova, 1930; Sushkin, 1938; Luvsankhorloo, 1961; Namnandorj, 1964; Shagdarsuren, 1969; Bold&Eregdendagva, 1970; Bold, 1972, Namnandorj, 1976; Tseveenmyadag, 1979; Shagdarsuren, 1980; Bold, 1983, 1989, 1997; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2004&2005; Nyambayar &Tseveenmyadag, 2009; Gombobaatar *et al.*, 2011b). Two birds were collected at Eznii Gol and Sogoo Lake in China, located near oases of Naran bulag, Ehiin gol and Tooroin Shand in Mongolia (Kozlova, 1930). According to Hennache & Ottaviani (2006), these oases in Mongolia may be a potential site for a separate subspecies, *Phasianus colchicus edzinensis*.

Population: The global population consists of 45,000,000 - 300,000,000 mature individuals, including all subspecies. Global breeding and resident ranges are estimated at 7,470,000 km² (BirdLife International,

2011). There is no population estimate for Mongolia. Bold (1972) estimated the density of the species in Khovd River valley at 1-2 individuals / km². Buyant (1998) found one individual / km² in Ih Aral, Bor Mod Aral, Ih Tuimert Aral in winter of 1999.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a resident breeder. It inhabits sandy soil with willow trees, *Caragana* sp. bushes, tall and dense reeds, groves of birch, mixed trees with birch, poplar, Sea Buckthorn and dense and tall bushes in W&E Mongolia. They winter in the areas with thin snow cover. They remain in the same roost site every night. Breeding behaviour begins by late March. Each pair occupies own breeding territory and mates. Males are polygamous and females nest alone. Nest is on the ground and is a shallow hollow, unlined or sparsely lined with dried plants and leaves in cover of tall plants or *Caragana* bushes, or other shrubs. Late April and early May, the female lays 6-12 (15) eggs with uniform olive-brown, or more definitive brown, olive or blue-grey colour. The female incubates the eggs alone for 21-27 days. If the first breeding attempt is unsuccessful, females reneest and lay a second clutch. During the incubation, the female loses 40% of her body mass. Young hatch in a short time and are tended by the female alone. The female broods and leads young to feed near nest sites. The broods can fly at 12-14 days. When the young are half-grown they tend to roost in trees at night. In autumn and winter, young birds remain together and feed on seeds, winter buds, roots and leaves. In summer, they feed on juicy leaves, flowers, buds, roots and insects. Local people saw adult pheasants digging holes and picking insects and their larvae in spring. In harsh winters, they prefer to stay near winter campsites of local herders or follow thin snow areas.

Habitat Type: 3. Shrub-land (3.4.); 11. Artificial – Terrestrial (11.3. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)- 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation. A high concentration of the livestock in Khovd River valley in spring, winter, and late autumn may destroy breeding habitats. Pheasants in the valley remain only in the areas fenced by local people. According to our estimate, 60-80% of wintering habitats were heavily overgrazed by livestock. High number of pheasants was counted only in fenced areas because these areas are less grazed. Local herders and local nature conservation community groups built the fence to protect pastureland and Sea Buckthorn fruit trees from livestock. The fences are also potential safe habitats for the pheasant as well (Gombobaatar *et al.*, 2011b).

1.3. Extraction-1.3.1. Mining: This is a potential threat to the species for future.

1.3.3. Wood-1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging: Local people cut the trees in the breeding sites for fuel in autumn, winter and early spring. People even cut full grown willows and Sea Buckthorn trees (Gombobaatar *et al.*, 2011).

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats to the species.

1.7. Fires: Forest fires may burn nests with eggs and young broods in early spring (Gombobaatar *et al.*, 2011b).

3. Harvesting (hunting or gathering) -3.2. Medicine-3.2.1. Subsistence use or local trade: Local herders use its meat for treating illness. However there is no proper scientific proof for this use.

3.4. Materials-3.4.1. Subsistence use or local trade: Local people shoot this species and illegally export it to China (S.Gombobaatar pers. comm.).

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Kazakh people shoot adult males and hang on the wall of their houses because they believe that it brings happiness to the family. Along the Khovd River valley, almost every single Kazakh family has got dried skin of the species (Gombobaatar *et al.*, 2011b).

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.

6. Pollution (affecting habitat and species)- 6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: The drought leads to changes in breeding and wintering habitats associated with vegetation degradation.

7.2. Storms or flooding-7.3. Temperature extremes: These are dominant threats to not only adults but also eggs and young chicks. In 1983-1984, many pheasants died in harsh winter due to lack of food and low temperature (Buyant, 1998). In winter of 2009, more than 20 pheasants died from starvation and cold in Khovd sum area, Uvs province (Bold, 1972; Buyant, 1998; Gombobaatar *et al.*, 2011b).

8.2. Predators: Carnivores in the breeding sites are Grey Wolf (*Canis lupus*) and Red Fox (*Vulpes vulpes*). Local people see the predation of Red Fox on the species in winter. In winter of 2011, we found three birds eaten by Red Fox in the valley of Khovd River of Böhmörön sum in Uvs province (Bold, 1972; Buyant, 1998; Gombobaatar *et al.*, 2011b). Potential predators are Eurasian Badger (*Meles meles*), and Steppe Polecat (*Mustela eversmanni*) in the breeding areas.

8.3. Prey or food base: This a potential threat to the species. See 7.2.

9. Intrinsic factors- 9.3. High juvenile mortality-9.9. Restricted range: This population is very sensitive to the increase of human impacts and number of predators because their distribution is very limited and mortality of juvenile is high (Buyant, 1998; Gombobaatar *et al.*, 2011b).

10. Human disturbance -10.1. Recreation and tourism: New buildings and gers and mineral mining near breeding sites threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have negatively affected the individuals that winter there.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Very Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1975. Approximately 19.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

13. Scientific Name: *Dendrocygna javanica*

Species Authority: (Horsfield, 1821)

Common Names: Lesser Whistling-duck or Indian Whistling-duck (English), Modny ankhir (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Israel, Pakistan, India,

Maldives, China, Sri Lanka, Nepal, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Taiwan, Japan.

Regional Distribution: In Mongolia, this species is found in Herlen River of Dornod province (48°26.660'N; 115°06.000'E), undated (Boldbaatar, 2001; Boldbaatar, 2002a; Bold & Mainjargal, 2006).

Population: The global population consists of 200,000 - 2,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this is a vagrant. There is only one record within the country. The species occurs in large freshwater lakes, ponds and pools with rich vegetation joining with other ducks in eastern Mongolian on migration. They feed on seeds and other green plants.

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.1., 5.5.- 5.8., 5.13.-5.17. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining; 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement; 6. Pollution -6.3. Water pollution; 7. Natural disasters-7.1. Drought; 8. Changes in native species dynamics-8.5. Pathogens or parasites; 10. Human disturbance-10.4. Transport.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, the species migrates through protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

14. Scientific Name: *Anser cygnoides*

Species Authority: (Linnaeus, 1758)

Common Names: Swan Goose (English), Khoshuu galuu (Mongolian)

Synonyms: *Cygnopsis cygnoides* Linnaeus, 1758; *Anas cygnoid* Linnaeus, 1758

Global Status: Vulnerable, A2bcd+3bcd

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because although it is not currently threatened, it is likely to undergo significant habitat loss and degradation through steppe fires, overgrazing and drought. It is also under threat from poaching. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Puerto Rico, Russian Federation (Amur, Sakhalin), Kazakhstan, Uzbekistan, China (Heilongjiang, Jiangsu), Mongolia, Thailand, Lao People's Democratic Republic, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Uvs Lake and the delta of Tes River (Northern Uvs Depression); Achit Lake in August, 1910 (six adults and three crèches in June, 1968); Khovd Gol Delta/Khar-Us Lake in June, 1995 (four adults and one crèche), Khar-Us, Khar Lakes and Chono Kharaikh River (40 adults and several tens of goslings, July 1975), Dörgön, Khyargas, Airag Lakes (510 adults and 40 crèches, July 1995, 35 adults and many chicks, June 1996) (Great Lakes Depression); Oigon Lake (flock of 12 and a pair with two goslings, June 1977); Zavkhan River (52 adults with more than 80 half-grown young on a large water body in June, unspecified year); (Desert-steppe Depression of Zavkhan); Ögii Lake (several nests found in June, 1975, 300 birds in June, 1977 and 1,000 in July, 1977, including four pairs with a crèche of 20 goslings in July 1977, 20 birds and some pairs nesting, May, 1996); Orkhon, Selenge Rivers (Orkhon-Selenge basins); Onon, Balj Rivers (Hentii Mountain Range); Herlen River (Middle Khalkh Steppe); Ulz (8 families in June, 1988), Döch Rivers and Höh, Galuut, Bus (11 adults and one crèche, June, 1998), Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (20 adults and three crèches in June, 1998), (Herlen-Ulz valleys); Khalkh (236 adults and one crèche in June, 1999), Nömrög Rivers and Buir, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog (10 nests with eggs found on a small island in the lake, May (unspecified year), pair with five young in May (unspecified year) by Piechocki (1968), 29 birds in the grazing marshes at the west end of the lake in September, 1998), Taatsyn Tsagaan Lakes and Tsagaan, Urt Rivers (Valley

of the Lakes); Bulgan River valley (Dzungariin Gobi). It migrates through breeding territories and Ganga Lake (Eastern Mongolia), Hövsgöl Lake and surroundings (Hövsgöl region), Tuul River (Hentii Mountain Range) (Przewalskii, 1876; Berezovskii, 1881; Pevtsov, 1883; Bianki, 1907; Tugarinov, 1916; Kozlova, 1930; Tugarinov, 1932; Sushkin, 1938; Bold, 1965; Shagdarsuren, 1969; Bold, 1973; Piechocki 1968; Bold, 1969; Shagdarsuren, 1969; Kitson, 1978; Samiya, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stephan, 1994; Dawaa *et al.*, 1994; Batdelger, 1996; Buckton *et al.*, 1998; Sumiya *et al.*, 2000; Tseveenmyadag, 1998; Tseveenmyadag *et al.*, 2000; BirdLife International, 2001; Sumiya, 2002; Gombobaatar *et al.*, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Goroshko, 2001, 2003, 2005; Goroshko, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 60,000 - 80,000 mature individuals. Global breeding and resident ranges are estimated at 1,620,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. Between 1990-1994, more than 200 individuals at Buir Lake, 73 individuals at Huh Lake, 2400 adult birds and more than 200 young in the Ulz River basin were counted (Gombobaatar *et al.*, 2003). The most recent field observations and counts in high numbers of Swan Goose in Eastern Mongolia were 1,076 individuals at Höh Lake in 2001 and 20 individuals at Höh Lake in 2002 (N.Tseveenmyadag pers. comm., Gombobaatar *et al.*, 2004), 1872 adults with 70 chicks in Buir Lake in 2001 (N.Tseveenmyadag pers. comm., Gombobaatar *et al.*, 2004), 910 adults with 76 chicks in 2001 and 170 individuals in 2002 in lower part of Ulz and its adjacent lakes (Tari, Galuut, Dóróó, and Bus Lakes) (N.Tseveenmyadag pers. comm., Gombobaatar *et al.*, 2003), 32, 453 adults and 110 chicks in Höh, Buir, low stream of Ulz River and other places in July, 2003 (Goroshko 2003; Gombobaatar *et al.*, 2003). In 2003, it is thought that many geese that usually moult on different lakes in Dauria gathered on Buir Lake. It is uncommon for such a high number of Swan Geese to gather on Buir Lake. Poor feeding conditions on other lakes in Dauria in 2003 are thought to be the cause. Nevertheless the data help to estimate the total number of geese in the Dauria Region (Goroshko, 2001&2003; Gombobaatar *et al.*, 2003). A total of 87 geese were observed in Ulz River in June, 1988. Eight breeding pairs with 4-5 goslings were counted each 5 km at lower part of Ulz River on 8-9 June, 1988 (Smirenskii *et al.*, 1991). Rose & Scott (1997) estimated its population at 50,000 birds and declining, the most recent global population is estimated at of 30-50,000 birds (BirdLife International, 2001). Y.Miyabayshi counted 845-2,985 individuals in Ögii Lake from June-August, 2003. Based on estimates from Scott (1997) and Goroshko's count data in the Höh, and Buir Lakes, Ulz River and its adjacent territories, it is estimated that 67.7% of the global population of Swan Goose were gathered in Eastern Mongolia in 2003. In addition, some breeding and gathering sites of Swan Goose in Eastern Mongolia such as Onon and Herlen Rivers and other lakes of the basins were not surveyed. This means that in 2003, more than 67.7% of the world Swan Goose population was concentrated in eastern Mongolia. The estimates show that Buir Lake and Galuut Lake, and Onon, Herlen and Ulz Rivers in eastern Mongolia are some of the main breeding, moulting, gathering and stopover sites of the world Swan Goose population. In order to provide data in support of these estimates, it is necessary to establish a monitoring programme in those areas where O.Goroshko counted several thousand moulting Swan Geese and breeding pairs with 218 young. In previous years, several hundred breeding, moulting and gathering Swan Geese in the Buir, Höh Lakes, Ulz River and its adjacent lakes, where Goroshko estimated 33,853 birds in 2003, were counted by Mongolian ornithologists. From 1994-2002, we did not visit the Buir Lake gathering site where Goroshko counted 29,056 individuals in 2003 (Goroshko, 2001&2003). The total number of Swan Geese in the transboundary Dauria is estimated at about 43,000 birds (from 40,300 to 45,500), it is up to 80% of the global population. In total, about 35,000-39,000 adult Swan Geese (that is about 64-71% of world population) inhabited north-eastern Mongolia in July 2004 (Goroshko, 2005).

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. It nests in dense reed beds, and dry ground in tall grasses and small bushes near lakes and rivers (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding season continues from April to August. Female lays 5-8 eggs of creamy white with fine granular textures. Incubation period is 28-30 days. Pairs with chicks occur from mid-June. Fledging time is from end of July

to beginning of August. By mid-August, families congregate and form small flocks. They graze short and green plants in wet meadows near large river, lakes, ponds and pools (Mongolian Red Data Book, 1997). In the autumn of 2001, a flock consisting of 20-60 individuals fed on wheat in the field of Khurkh River. There is no research on the breeding and feeding behaviour of this species in Mongolia (Gombobaatar *et al.*, 2003). Combining the averaged data for 2001 and 2002, 23 breeding pairs produced 108 chicks in the Herlen, 21 breeding pairs produced 102 chicks in the Ulz, 21 breeding pairs produced 105 chicks in the Onon River basins and 18 breeding pairs produced 81 chicks in the Buir Lake. In Eastern Mongolia during 2001 and 2002 combined, 83 successful breeding pairs produced 396 chicks (mean 4.7). There was no statistically significant difference between numbers of chicks in each of the basins (Gombobaatar *et al.*, 2003). Moulting begins by mid-July and completes by late July. During moulting time this goose prefers to congregate in flocks on surface of open deep water near islands and eat leaves and stems of the water plant *Potamogeton pectinatus* (Goroshko, 2005a). There are several important sites for moulting and stop-over in the country. A total of 6,000 migrating birds were reported in Doityn Tsagaan Lake in May, 1996. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: Habitat Type: 5. Wetlands (inland) (5.3.-5.8., 5.9. on migration, 5.13., 5.14.-5.17. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation

1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds/moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Forest and steppe fires may burn breeding habitats near lakes and rivers. Fires may burn nests with eggs and young.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several species of birds, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: It is thought that its numbers have decreased to a few thousand birds because of hunting (BirdLife International, 2001). But hunting is not likely to be the sole reason of death of a thousand birds in Mongolia. Local herding families do not hunt the species in Mongolia. Some local hunters are known to occasionally shoot Swan Geese during the hunting season. Identification of geese species by herders is poor and the best way to increase public awareness about Swan Goose within local, ranger and hunter communities is to print and distribute educational awareness posters and leaflets in Mongolian (Gombobaatar *et al.*, 2003).

4.1.2.3 Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution-5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: During the past few years, the weather in Mongolia has been very dry. As a result of low precipitation throughout the year, most rivers, lakes, ponds and their meadows, vital for breeding and moulting Swan Geese, were dry in Eastern Mongolia. In addition, during dry years, local herders and livestock concentrate at the lakes, rivers and ponds near breeding areas of the species. Both of these situations have a negative effect to breeding and moulting birds (Gombobaatar *et al.*, 2003).

8. Changes in native species dynamics-8.2. Predators: The Raccoon Dog (*Nyctereutes procyonoides*) was numerous and destroyed many clutches in 1996 (at least 85 % of the clutches were lost to this predator on the Bus nuur Lake) (Goroshko, 2001). In 1990 and 1991, A.Bold and N.Tseveenmyadag observed the Raccoon was eating eggs and lying on the nest of Swan Goose at Döröö Lake of Ulz River basin (A.Bold & N.Tseveenmyadag pers comm., 2003). Potential predators are carnivores such as Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless and slow-moving chicks and possibly moulting individuals at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7. Goroshko (2001) mentioned that approximately 10-20% of breeding pairs lost clutches due to steppe fires in Ulz River in 2000. Spring and autumn are very dry seasons in Mongolia. During 1997 and 1998, some important Swan Goose breeding areas in Ulz and Herlen Rivers were burnt by steppe fires. Burnt Swan Goose nests with eggs were found in these regions. According to our field observation, steppe fires are one of main factors to the breeding population in eastern Mongolia (Gombobaatar *et al.*, 2003).

Conservation Measures: Mongolian herders and local families traditionally protect migratory birds such as geese, ducks and cranes. They never collect eggs, destroy nests, or hunt migratory birds such as the Swan Goose. We consider that wide open space, suitable habitat and traditions of Mongolia are the main reasons for a high population density of Swan Geese in Mongolia. Listed as Rare in the Mongolian Red Data Book (1997), it was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001 (Gombobaatar *et al.*, 2003). Approximately 8.1% of the species' range in Mongolia occurs within protected areas. Listed in Mongolian Hunting Law of 2000 as a rare species. Stopover and migration sites include some Important Bird Areas, Onon-Balj National Park (NP), Ugtam Nature Reserve (NR), East Mongolia and Khar-Us NP, Uvs Lake SPA, West Mongolia (Gombobaatar *et al.*, 2003). Listed in the Anatidae Site Network in the East Asian Flyway: Terhiin Tsagaan and Ögii Lakes (Gombobaatar *et al.*, 2003). Listed in the Ramsar convention sites in Mongolia: Mongol Daguur (SPA), Terhiin Tsagaan, Khar-Us, Airag (NP) and Ögii Lakes (no status of protection), Gobi Lakes (Böön-tsagaan and Orog Lakes) (no status of protection).

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

15. Scientific Name: *Anser fabalis*

Species Authority: (Latham, 1787)

Common Names: Bean Goose (English), Buural galuu (Mongolian)

Subspecies in Mongolia: *A. f. serrirostris*, *A. f. middendorfi* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Iceland, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Egypt, Turkey, Russian Federation, Lebanon, Islamic Republic of Iran, Islamic Republic of, Kazakhstan, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Myanmar, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: The species migrates along Buyant, Khovd Rivers and Khoton, Dayan, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Khovd and Böhömörön Rivers (Kharkhiraa and Turgen Mountains); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River with reed beds (Great Lakes Depression); Zavkhan and Hungui Rivers (Desert-steppe Depression of Zavkhan); Tamir, Ider, Chuluut and Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Tui and Baidrag Rivers and many small lakes (South Khangai Plateau); Terhiin Tsagaan, Ider and Chuluut Rivers, Sangiin Dalai, Telmen, Khar Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen Rivers (Hentii Mountain Range); Herlen River (Middle Khalkh Steppe); lower Herlen, Ulz, Döch, Khariin Rivers, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Herlen-Ulz valleys); Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga, Galdastai Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar Lakes, Tashgain Tavan Lake, Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, Taatsyn Tsagaan Lakes and Tsagaan, Urt Rivers (Valley of the Lakes) Bulgan River valley (Dzungariin Gobi). Intensive migration occurs in Central and Eastern parts of the country (Przewalskii, 1876; Bianki, 1907; Buturlin, 1913; Tugarinov, 1916; Sushkin, 1925; Tugarinov, 1929; Kozlova, 1930&1932; Sushkin, 1938; Pevtsov, 1951; Tarasov, 1960; Bold, 1965; Bold, 1969; Shagdarsuren, 1969; Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Boldbaatar, 2006; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 830,000 - 850,000 mature individuals. Global breeding and resident ranges are estimated at 13,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia and summer visitor. This species occurs in fresh water and saline lakes, marshes and pools with tall sedges and reeds, and other wetlands on migration. There is no breeding record for Hövsgöl Lake areas where plenty of suitable breeding habitats exists (Sumiya & Skryabin, 1989). They arrive in Mongolia by late April–early May depending on weather conditions. They graze in wetlands, meadows, and wheat field in summering and migrating periods in the country. Migrating flocks consisting of 3-20 birds occur together with Swan Goose and Greylag Goose in these areas in Mongolia. They feed on short plants and wheat grains in the country. Autumn migration is observed by late August–early September depending on food availability and weather conditions of the year.

Habitat Type: 5. Wetlands (inland) (5.3.-5.8., 5.9. on migration, 5.13., 5.14.-5.17. on migration); 12. Artificial – Aquatic (12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affect the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing mass mortalities of fishes (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010)/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./-4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza is a potential threat to the species. Danzan (1964) found few species of helminths such as *Notocotylus attenuatus* Rud., *Hymenolepis setigera* Frohlich, *Drepanidotaenia lanceolata* Bloch in this species in Mongolia/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

16. Scientific Name: *Anser albifrons*

Species Authority: (Scopoli, 1769)

Common Names: Greater White-fronted Goose or White-fronted Goose (English), Mankhin galuu (Mongolian)

Subspecies in Mongolia: *A. a. albifrons* (see Madge & Burn (1988); Baker (1993); Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. Only a few birds migrate through eastern and central Mongolia and habitat loss, drought and human disturbance present threats to this species. This species is likely to be upgraded to a threat category in the near future. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Belize, Cuba, Aruba, Netherlands Antilles, Saint Pierre and Miquelon, Greenland, Mauritania, Morocco, Ireland, Portugal, Spain, United Kingdom, Faroe Islands, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Ukraine, Bulgaria, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Myanmar, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: The species migrates along wetlands and wheat fields in valleys of Orkhon, Selenge, Eg, Kharaa, Buur, Yeröö Rivers (Orkhon-Selenge basins) and upper Tuul, Onon, Balj, Herlen Rivers (Hentii Mountain Range) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008) and Erhil Lake (Hövsgöl) (Sh. Boldbaatar pers. comm.) and Ganga Lake, Suhbaatar province (N. Tseveenmyadag pers. comm.). One individual was seen in Airag Lake in 2008 (Sh. Boldbaatar pers. comm.), and a single adult was photographed by Ch.Uuganbayar in Ögii Lake in October of 2006 (Tsegmid & Uuganbayar, 2006). One bird was photographed by Bräunlich in Baga Lake at Khomiin Tal of Khovd province on 26 October, 2007 (A.Bräunlich pers. comm.). Several birds were observed with Grey-lag Goose near Nariin River of Uvs Depression 29 September, 1989 (Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 2,600,000 - 3,100,000 mature individuals. Global breeding and resident ranges are estimated at 5,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a relatively rare passage migrant. This species rests and refuels at lakes, rivers and other wetlands on migration. They arrive by late April-early May on spring migration and by late August-early September; late migrants were seen in late October in Mongolia. They occur singly or in loose groups joining with Greylag Goose. It grazes in wet meadows and marshes with short vegetation near lakes and in lake valleys on migration.

Habitat Type: 5. Wetlands (inland) (5.3.-5.8., 5.9. on migration, 5.13., 5.14.-5.17. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /gill net for fishing is a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters-7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 9.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

17. Scientific Name: *Anser erythropus*

Species Authority: (Linnaeus, 1758)

Common Names: Lesser White-fronted Goose (English), Odoi galuu (Mongolian)

Global Status: Vulnerable, A2bcd+3bcd

Regional Status: Vulnerable, A2a,c; B1; C

Rationale for Assessment: This species has assessed as Vulnerable. Population reduction observed and extent of occurrence is less than 20,000 km². The population size is unknown but may qualify for a threat category; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: United States, Ireland, Spain, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Switzerland, Denmark, Austria, Sweden, Czech Republic, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia. This species' presence and origin is uncertain in Belarus, Egypt, Turkey, Republic of Moldova, Russian Federation, Israel, Jordan, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Pakistan, India, China, Mongolia, Myanmar, Taiwan, Republic of Korea, Japan.

Regional Distribution: The species migrates along the end of Herlen and Ulz Rivers, and Höh, Döröö, Galuut, Khaichiin Tsagaan, Khoriiin Tsagaan, and Delger Tsagaan Lakes (Herlen-Ulz valleys); Khalkh, Nömrög, Azarga Rivers; and Buir, Tashgain Tavan and Khonkhor Lakes (Buir Lake-Khalkh River-

Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a Tseveenmyadag *et al.*, 2005; Nyambayar & Tseveenmyadag, 2009) and Sangiin Dalai Lake (N.Tseveenmyadag pers. comm., 2008).

Population: The global population consists of 20,000 - 25,000 mature individuals. Global breeding and resident ranges are estimated at 1,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a passage migrant in Mongolia. Migrating birds are found on spring migration (late April-early May) and on autumn migration (late August-early September), depending on food availability and weather conditions. During the migration, individuals and small groups join with Greylag Goose and Swan Goose in large lakes and ponds in eastern Mongolia. Migrating birds graze in wet meadows, marshes with short vegetations, and wheat fields in autumn. Resting and roosting birds are also found on lake shores and river banks in Mongolia.

Habitat Type: 5. Wetlands (inland) (5.3.-5.8., 5.9. on migration, 5.13., 5.14.-5.17. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/;
3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade / people occasionally shoot this species for its meat/;
4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /gill nets for fishing is a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./;
6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/;
7. Natural disasters-7.1. Drought /see 6.1.1./;
8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/;
10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 9.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

18. Scientific Name: *Anser anser*

Species Authority: (Linnaeus, 1758)

Common Names: Greylag Goose (English), Bor galuu (Mongolian)

Subspecies in Mongolia: *A. a. rubirostris* (see Madge & Burn (1988); Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Argentina, Falkland Islands (Malvinas), Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Syrian Arab Republic, Iraq, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong, Republic of Korea, Japan.

Regional Distribution: This species breeds Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Bayan and Baga Lakes (Altan Els), Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes, Khomyn Khooloi, and the delta of Khovd River with reed beds (Great Lakes Depression), Zavkhan River (Desert-steppe Depression of Zavkhan); Orkhon River valleys and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai Lakes (Tarvagatai-Bulnai Mountains). Breeding pairs were found in the lakes of the valley of Orkhon, Selenge Rivers (Orkhon-Selenge basins), Onon and Balj Rivers (Hentii Mountain Range), Ulz River, Khalkh, Nömrög, Azarga River (Buir Lake-Khalkh River-Khyangan region), Bulgan River (Dzungariin Gobi) and lakes such as Höh, Döröö, Galuut, Khaichiin/Delger Tsagaan Lakes (Herlen-Ulz valleys); and Buir, Tashgain Tavan Lake, Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, Taatsyn Tsagaan Lakes and Tsagaan (Valley of the Lakes) (Berezovskii, 1881; Kozlov, 1900; Bianki, 1907; Bianki, 1915; Kozlova, 1930; Tugarinov, 1932; Sushkin, 1938; Tarasov, 1960; Bold, 1965; Shagdarsuren, 1969; Bold, 1973; Piechocki *et al.*, 1981; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). It migrates through breeding areas and also Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression; lakes and rivers in forest steppe and steppe). A few individuals winter at Chono Kharaiikh River and Terhiin Tsagaan Lake (Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004).

Population: The global population consists of 1,000,000 - 1,100,000 mature individuals. Global breeding and resident ranges are estimated at 13,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. However, 150 individuals were recorded in Hövsgöl Lake (Sumiya & Skryabin, 1989)

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and summering individuals arrive in their breeding and summering sites by mid-April-early May. Breeding begins in early May and continues into August. It nests in tall reed beds, dry ground in marshy and swampy areas on islands, near rivers and lakes (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is usually a scrape with a scanty lining of local vegetation, but in wet sites may be an accumulated mound of reeds or rushes. The female usually lays 4-6, rarely 3-8 eggs of creamy-white with slight fine granular texture. The female incubates the eggs alone for 27-28 days. The young leave the nest after hatching. Both sexes care for and brood the young. They can find their own food and live independently by c. 8 weeks. They feed on grain, root crops and leafy vegetation. Geese have relatively short bills, and prefer pasture or meadows that are grazed by cattle or sheep. Flocks consisting of 3-50 birds graze in wet and dry meadows near large lakes and rivers on migration. During the migration, they occur in a variety of different wetlands such as fresh water and saline lakes, rivers, pools, ponds, brackets, wheat field from forest steppe to steppe, and wetlands in desert steppe and oases in Gobi Desert. Most migrating and

breeding birds leave the country for wintering grounds by late August–mid-September, depending on food availability, and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.3.-5.8., 5.9. on migration, 5.13., 5.14.-5.17. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through contamination by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./-4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas. A total of 20 individuals were poisoned and died in the wheat fields of Dadal sum of Hentii province in 1985 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza is a potential threat to the species. Danzan (1964) discovered several species of helminths such as *Notocotylus attenuatus* Rud., *Hymenolepis setigera* Frohlich, *Drepanidotaenia nyrocae* Jamaguta, *Polymarphus magnus* Skryabin, *Grichostrongylus tenuis* Mehlis from this species/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

19. Scientific Name: *Anser indicus*

Species Authority: (Latham, 1790)

Common Names: Bar-headed Goose (English), Heeriin galuu (Mongolian)

Synonyms: *Eulabeia indica* Latham, 1790; *Anas indica* Latham, 1790

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, Russian Federation, Kazakhstan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Japan.

Regional Distribution: This species breeds at Höh Lake (Munkhkhairkhan range), Döröö, Tolbo, Khoton, Khorgon, Dayan, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Khovd and Böhmörön Rivers (Kharkhiraa and Turgen Mountains); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and Chono Kharaiikh River (Great Lakes Depression); Zavkhan and Hungui Rivers (Desert-steppe Depression of Zavkhan); Höh Lake (Otgontenger mountain), Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan Lake and Terh, Ider, Khanui, Tamir Chuluut Rivers, Sangiin Dalai, Telmen Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression) Orkhon, Selenge, Eg Rivers (Orkhon-Selenge basins); Tuul River (Hentii Mountain Range); Bööntsagaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi). It migrates through breeding territories and rarely through Herlen, and Ulz River valleys (Berezovskii, 1881; Potanin, 1883; Lushnikov, 1894; Bianki, 1907; Dorogostaiskii, 1908; Buturlin, 1913; Tugarinov, 1929; Kozlova, 1930; Sushkin, 1938; Pevtsov, 1951; Tarasov, 1960; Shagdarsuren, 1969; Bold, 1973; Sumiya, 1973; Samiya, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 52,000 - 60,000 mature individuals. Global breeding and resident ranges are estimated at 2,370,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a breeding visitor. Most breeding and migrating birds arrive in the country by early April-early May. Breeding begins in late April-early May. It nests in trees, cliffs, rocks, and slopes with rocks near river, ponds and lakes (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build their nest in old stick nests of steppe raptors (Upland Buzzard, Saker Falcon, Black Kite) placed in trees. They add nest materials in the nest and line it with down. The nest is usually a shallow hollow on raised ground, or ledge, or twig tree-nest, thickly lined with down. Female lays 4-6, occasionally 2-8 eggs of creamy-white colour. The female incubates the eggs alone for 28-30 days. Both parents care for and brood young. They remain together until next breeding season. They graze short green plants, roots and buds in wet meadows, lake shores and river banks in breeding season, and also wheat grain, and may damage crops on migration. They moult by early July, completing in mid-July and early August. Family members join with each other, forming large flocks of 6-2,000 individuals in large saline and freshwater lakes, shores of these lakes, river banks, pools and ponds with wet meadows during migration. They leave Mongolia for wintering grounds by mid-August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); Habitat Type: 5. Wetlands (inland) (5.3.-5.8., 5.9. on migration, 5.13., 5.14.-5.17. on migration); 6. Rocky areas near lakes and rivers; 12. Artificial – Aquatic (12.1., 12.9.).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.3.3. Wood-1.3.3.1. Small scale subsistence: Local people cut the tree with its nest for fuel.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species feeds and moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Forest fires may burn breeding habitats near lakes and rivers. Fires may burn nests with eggs and very rarely young hatchlings.

3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several species of birds, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to eat the meat of this species or to make stuffed souvenirs occasionally shoot it.

4.1.2.3. Poisoning: Rodenticide like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*) at feeding site of the species is a potential threat to breeding and non-breeding birds .

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations.

5. Persecution-5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

8. Changes in native species dynamics-8.2. Predators: Carnivores such as Eurasian Eagle-owl, Grey Wolf (*Canis lupus*), and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks in the nest for midnight.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia. Bar-headed Goose was infected by avian influenza (H4N6) at Bööntsagaan Lake of Bayankhongor province and Khargal Lake of Teshig sum of Bulgan sum in 2009 (Batchuluun & Damdindorj, 2011). Danzan (1964) found parasitic worms (*Notocotylus attenuatus* Rud., *Hymenolepis setigera* Frohlich) in this species of goose.

10. Human disturbance-10.4. Transport: Transport by boat, cars and horses near tourist camps and busy roads have been negatively affecting the individuals that breeds and passes through. Two nests with full clutch in elm trees at Hustai Nuruu National Park in June 2009&2010, and two nests with full clutch in shore cliffs of Ögii Lake in June 2006 deserted due to tourism and a busy road. 10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1975. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

20. Scientific Name: *Cygnus olor*

Species Authority: (Gmelin, 1789)

Common Names: Mute Swan (English), Khuruut khun (Mongolian)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. This species is likely to be upgraded to a threat category in the near future. The number of breeding pairs in certain areas of Mongolia has been decreasing over the last few years due to drought and overgrazing. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Bermuda, Iceland, Morocco, Ireland, Portugal, Spain, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Jordan, Lebanon, Iraq, Armenia, Islamic Republic of Iran, Kazakhstan, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Mongolia, Australia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan, New Zealand.

Regional Distribution: In Mongolia, this species a breeding visitor. Three active nests were found in Bööntsagaan Lake of Bayankhongor province by mid-June of 2008 (N.Tseveenmyadag pers. comm.), pair with chicks in Buir Lake in June, 2008 and Ögii Lake in June, 2007 and 4 pairs with chicks and additional 68 individuals in Orog Lake in June, 2001 (Sh. Boldbaatar pers. comm.). It migrates through Böhömörön River and Uureg Lake (Sushkin, 1938); Khar-Us, Khar, Dörgön, Khyargas, Airag (Great Lakes Depression) (Berezovskii, 1881; Potanin, 1883; Bianki, 1907); Ögii (Khangai Mountain Range), Bööntsagaan, Orog and Taatsyn Tsagaan Lakes (Valley of the Lakes) (Kozlov, 1900; Tugarinov, 1929; Kozlova, 1930; Pevtsov, 1951; Shagdarsuren, 1969; Piechocki *et al.*, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Boldbaatar, 2008). Single individuals were seen in Buir and Bayan Lakes of Dornod province (N. Tseveenmyadag and S.Gombobaatar pers. comm.). Single individuals were seen in Buir and Bayan Lakes (Tseveenmyadag pers.comm.) and Ögii Lake of Övörkhangai province in 2005 and 2006 (Tsegmid&Uuganbayar, 2006).

Population: The global population consists of 600,000 -610,000 mature individuals. Global breeding and resident ranges are estimated at 4,990,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this is a breeding visitor and summer visitor. Most breeding and summering individuals arrive in breeding and summering sites by mid-April-early May. Breeding pairs breed on any waters, large or small, fresh or brackish, and in swamps and drainage ditches. Nest is usually placed at the water's edge on land or small islands, or built in shallow water in reed beds. The nest is a large heap of plant material with a raised hollow at the centre. Female lays 5-7, exceptionally 4-12 eggs of slightly glossy white with a pale blue-grey or blue-green tint textured by slight granular.

Both parents, but chiefly the female, incubate the eggs for 34-38 days. Young stay on the nest for a day or two; then follow parents. Both adults care for and brood young, and help to pull up and break up plants and roots. The young live independently by c. 4 months. Both adults and young feed chiefly on submerged aquatic vegetation, which is obtained by upending (tipping head first into the water, so that the tail remains visible above the surface) <http://www.arkive.org/mute-swan/cygnus-olor/> - reference_5. On migration, they form flocks consisting of 3-20 individuals foraging in wet meadows, marshes, and in freshwater lakes and pools. Migrating individuals are found on shores of large lakes and banks of large rivers during the resting. They leave Mongolia by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.4.- 5.9., 5.13., 5.14.-5.17. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs in summer. The overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds/moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several species of birds, including this species were rarely collected and stuffed for display in public service places.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to eat the meat of this species or to make stuffed souvenirs occasionally shoot it.

5. Persecution-5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important resting sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

8. Changes in native species dynamics-8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia. Danzan (1964) found parasitic worms such as *Hymenolepis aeguabulis* Rud., *Drepanidotaenia nyrocae* Jam. in this species.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1973. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 10.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

21. Scientific Name: *Cygnus cygnus*

Species Authority: (Linnaeus, 1758)

Common Names: Whooper Swan (English), Gangar khun (Mongolian)

Subspecies in Mongolia: *C. c. cygnus* (see Madge & Burn (1988) and Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: United States, Greenland, Iceland, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Russian Federation, Cyprus, Israel, Armenia, Islamic Republic of Iran, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Tolbo, Achit, Uureg, Khoton, Khorgon Lakes (Mongol-Altai Mountain Range); Dund Lake (Siilhem Mountains); Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Bayan Lake, Zavkhan River (Desert-steppe Depression of Zavkhan); Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Khar Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake (Darkhad Depression); Orkhon, Selenge, Kharaa, Yeröö Rivers (Orkhon-Selenge basins); lower Tuul, Onon, Balj Rivers (Hentii Mountain Range); Herlen River (Middle Khalkh Steppe); Ulz, Döch Rivers and Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Herlen-Ulz valleys); Khalkh, Degee, Nömrög, Azarga Rivers and Buir, Shavar Lake, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi). The species migrates along breeding territories and also Zakhui oasis (Trans-Altai Gobi Desert) (Buturlin, 1913; Tugarinov, 1929; Kozlova, 1930 Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stenzel *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). It winters in Uvs, Khar-Us, Khar, Airag, Hövsgöl, Terhiin Tsagaan Lakes, Nagoon Khooloi, Yamyn Khooloi, Khomyn Khooloi, Chono Kharaiikh, Zavkhan, Tatkhan Teel, Sum rivers (Berezovskii, 1881; Tugarinov, 1929; Dulamtseren, 1967; Piechocki *et al.*, 1981; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Nyambayar, 2003; Gombobaatar, 2004).

Population: The global population consists of 180,000 mature individuals. Global breeding and resident

ranges are estimated at 17,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a common breeding visitor. They arrive in breeding sites by mid-April-early May. Breeding begins in late April-early May, continues into August. This species breeds at lakes, ponds, pools with reed beds, and small rivers with tall marshy grasses (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is placed at the water's edge, usually on an island or islet, or a raised bank in swamp. They are solitary nesters. One site may be used for a number of years. The nest is a large heap of nearby plant material, including water plants and moss. Large white down tufts and small feathers present in the nest. The female usually lays 5-6, occasionally 4-8 eggs of creamy-white, partly glossy with slightly granular surface texture. The female incubates the eggs for 35-42 days. Male guards the nest with eggs and the female. Both parents care for and help young to forage. The young, known as cygnets, will have fully fledged after a further 87 days. The young remain with adults until next breeding season. They feed on water plants, grass and wheat grains. Migrating flocks of 7-600 individuals gather in large fresh water and saline lakes in forest steppe, steppe and desert steppe. Moulting birds are found in large open lakes, Sharga, Terhiin Tsagaan (Khangai Mountain Range), Khaichiin Tsagaan, Khorin Tsagaan, Delger Tsagaan (Ulz River valley), Buir, Tashgain Tavan Lakes (Khyangan-Buir Lake areas) and small lakes with dense reed beds such as Chukh and Bus Lakes by end of July. Breeding and migrating birds leave the country for wintering grounds by September, depending on weather conditions. A number of individuals winter in unfrozen lakes and rivers in western Mongolia (Gombobaatar, 2004).

Habitat Type: 5. Wetlands (inland) (5.1., 5.4.-5.9., 5.13.-5.17)

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: In winter, livestock of local families drink fresh water in the unfrozen open water where they roost and feed at mid-day. Drinking water of local families, their livestock and wintering site of the species overlap along some lakes and rivers in winter and spring, summer and autumn. According to our field survey, birds move to unfrozen open water sites in close proximity and to lake and river valleys, while cattle come to the sites in the morning in winter. It is not likely to be a dangerous threat for wintering ducks in Mongolia. But detailed field survey of the subject is required (Gombobaatar, 2004). Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds/moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Forest and steppe fires burn reed beds in their breeding habitats near lakes and rivers. Fires may burn nests with eggs and very rarely young hatchlings.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several species of birds, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to eat the meat of this species or to make stuffed souvenirs occasionally shoot it.

4.1.2.3 Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations.

5. Persecution-5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)

6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

7.3. Temperature extremes: Freezing of open water where wintering Swans are at high density is a serious factor in lakes and rivers during cold winters. A cause of mortality for wintering Swans was becoming stuck on feet or belly (Berezovskii, 1881; Navake, 1970, Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Nyambayar, 2002; Gombobaatar, 2004).

8. Changes in native species dynamics-8.2. Predators: Carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis lupus*), and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless and slow-moving chicks and moulting individuals at night. There were a few records of predation caused by freezing in previous years in Tuul River and Khar-Us Lake National Park. At night, birds usually roost at shallow watersides of the wintering rivers and lakes. Roosting water birds in shallow water may quickly freeze due to a sudden drop in night air temperature. In early morning, carnivores such as Red Fox (*Vulpes vulpes*) and Grey Wolf (*Canis lupus*) in the region easily prey upon the immobilized Swans in frozen rivers and lakes (Bold *et al.*, 1998; Gombobaatar, 2004).

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia. Whooper Swans were infected by highly pathogenic avian influenza viruses (H5N1) at Erhil Lake of Hövsgöl province on 29 July, 2005; at Khunt Lake of Bulgan province on 6 May, 2006 and 5 August, 2005; at Doit lake of Arkhangai province 10 May, 2009; at Ganga Lake of Suhbaatar province on 12 May, 2010; at Zegst Lake of Suhbaatar province on 8 April, 2010; at Ögii Lake of Arkhangai province and Angirt Lake of Chuluunkhoroot sum of Dornod province in 2009 and 2010 (Batchuluun & Damdindorj, 2011).

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Very Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1933. Mongolia has a long tradition of protection for this species as a result of its religious significance. Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

22. Scientific Name: *Cygnus columbianus*

Species Authority: (Ord, 1815)

Common Names: Tundra Swan (English), Gungar khun (Mongolian)

Subspecies in Mongolia: *C. c. bewickii* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Sangster *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Cuba, Puerto Rico, Virgin Islands, Antigua and Barbuda, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Hungary, Slovakia, Montenegro, Serbia, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Russian Federation, Israel, Jordan, Iraq, Islamic Republic of Iran, Kazakhstan, United Arab Emirates, Oman, Turkmenistan, Pakistan, India, China, Nepal, Mongolia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: The species migrates along Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range) (Tsegmid & Uuganbayar, 2006); Terhiin Tsagaan (Tarvagatai-Bulnai Mountains); lower Tuul, Onon, Balj Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Khalkh, and Nömrög Rivers, and Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog Lakes (Valley of the Lakes) (Kozlova, 1930; Bold, 1969; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005). Five individuals together with Whooper Swans were observed at delta of Nariin River and Uvs Lake of Uvs Depression 1 October, 2010 (Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 300,000 mature individuals. Global breeding and resident ranges are estimated at 5,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia except for frequent records at the lakes.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. They pass through the lakes by late April-early May during the spring migration and late August-early September during the autumn migration, depending on weather conditions. On migration they form flocks of 4-20 individuals and feed on aquatic and terrestrial green plants in large lakes, wet meadows and marshes. It possibly feeds on wheat grain joining with Whooper Swans in the east.

Habitat Type: 5. Wetlands (inland) (5.1., 5.5.- 5.9., 5.13.-5.17. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy

metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 6.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

23. Scientific Name: *Tadorna ferruginea*

Species Authority: (Pallas, 1764)

Common Names: Ruddy Shelduck (English), Khondon angir or angir (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Iceland, Western Sahara, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Ukraine, Bulgaria, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan. It is regionally extinct in Turkmenistan.

Regional Distribution: This species nests and migrates in/through almost all territories of the country except for taiga, steppe and desert steppe without water source, and alpine tundra (Kozlova, 1930; Bold, 1969; Bold, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002;

Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). Birds have been wintered in Khar-Us, Terhiin Tsagaan Lakes and Tuul River (more than 500 individuals each year) near Ulaanbaatar (Bold *et al.*, 1998; Bold *et al.*, 2000; Gombobaatar, 2004).

Population: The global population consists of 170,000 - 220,000 mature individuals (BirdLife International, 2011). The number of mature individuals may be more than they estimated. We counted 80,000 individuals in a lake in the valley of Khurkh-Huiten in August, 2007 (S. Gombobaatar pers. comm.). According to our field survey of 2004, 534 Ruddy Shelducks wintered in the wastewater channels located west of Ulaanbaatar (Gombobaatar, 2004). The data shows clearly that the number of mature individuals must be much more than the estimate. Global breeding and resident ranges are estimated at 18,400,000 in the World (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: For Mongolia, this species a common breeding visitor. They arrive in breeding sites by late March-early April. Breeding begins in late April-early May, continues into August. This species nests in rock holes, crevices, burrows, in burrows, or in ruins and tree holes near pools, ponds, lakes, creeks and rivers (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a hollow with little plant material, lined with down and some feathers. Female lays 8-12, rarely 16 eggs of slightly glossy creamy-white, colour. The longest distance between nesting site to the closest wetland in the steppe was 15 km in Mongolia. The female incubates the eggs alone for 27-29 days. Both parents care and defend the young. They remain together until migration. Both adults and young graze aquatic and terrestrial green plants in wet meadows, marshes and wetlands. In breeding season, they feed on insects, fishes, frogs and worms. It plucks or grazes on vegetation while on land, and dabbles while swimming, often upending to feed on aquatic plants and other food items. In breeding season, breeding birds occur in pairs. Summering birds form large flocks of 10 up to 3,000 individuals and feed on open water areas of large lakes. On migration, very large flocks consisting of 20-8,000 birds gather in large lakes and wheat fields in Mongolia. Most breeding and summering birds leave their breeding and summering sites for wintering grounds by early to late September. Some birds have wintered in unfrozen lakes and rivers in central and western Mongolia. A total of 534 Ruddy Shelducks wintered in the wastewater channels located W Ulaanbaatar city and only 28 individuals of the species wintered in natural unfrozen open water of Tuul River, which includes Arctic Ocean drainage depending on water temperature. Significantly positive correlation occurred between high temperatures of water and wintering Ruddy Shelduck numbers at the site in 2004 (Gombobaatar, 2004).

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 5. Wetlands (inland) (5.1.-5.9., 5.11., 5.13.- 5.17.); 6. Rocky areas near lakes and rivers; 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.7., 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Livestock of local families drink fresh water in the unfrozen open water where they roost and feed at midday. Drinking water of local families, their livestock and wintering site of the species overlap along some lakes and rivers in winter and spring, summer and autumn. According to our field survey, birds move to unfrozen open water sites in close proximity to lake and river valleys while cattle come to the site in the morning in winter. It is not likely to be a dangerous threat for wintering ducks in Mongolia. But, detailed field survey of the subject is required (Gombobaatar, 2004). In summer, livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression:

the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Forest and steppe fires burn reed beds in their breeding habitats near lakes and rivers. Fires may burn nests with eggs and very rarely young hatchlings.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several species of birds, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to eat the meat of this species or to make stuffed souvenirs occasionally shoot it.

4.1.2.3 Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tsevenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution- 5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species) -6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

7.3. Temperature extremes: Freezing of open water where wintering Shelducks are at high density is a serious factor in lakes and rivers during cold winters. A cause of mortality for wintering ducks was getting the feet or belly stuck in quickly-forming ice (Berezovskii, 1881; Navake 1970, Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Nyambayar, 2002; Gombobaatar, 2004).

8. Changes in native species dynamics-8.2. Predators: Carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis lupus*), and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless and slow-moving chicks and moulting individuals at night. There are records of predation caused by numbness in previous years in Tuul River and Khar-Us Lake National Park. At night, birds usually roost at shallow watersides of the wintering rivers and lakes. Roosting water birds in shallow water may quickly freeze due to a sudden drop in night air temperature. In early morning, carnivores such as Red Fox (*Vulpes vulpes*) and Grey Wolf (*Canis lupus*) in the region easily prey upon the flightless and slowly moving Shelducks in frozen rivers and lakes (Bold *et al.*, 1998; Gombobaatar, 2004).

8.3. Prey or food base: This species is one of the main prey of Saker Falcon in Mongolia (Gombobaatar, 2006).

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia. Ruddy Shelduck was infected by highly pathogenic avian influenza viruses (H5N1) at Duruu Lake of Arkhangai province on 5 August, 2009; H10N6 virus at Turgen Tsagaan and Khorin Tsagaan Lakes of Dashbalbar sum of Dornod province; Jargal Lake of Ömnödelger sum of Hentii province in 2009 (Batchuluun & Damdindorj, 2011).

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 9.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

24. Scientific Name: *Tadorna tadorna*

Species Authority: (Linnaeus, 1758)

Common Names: Common Shelduck (English), Ankhidal angir or ankhidal (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Iceland, Senegal, Mauritania, Guinea-Bissau, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Ghana, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Uvs Lake and the delta of Tes River (Northern Uvs Depression); Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan River (Desert steppe depression in Zavkhan); Orkhon River, Ögii Lake (Khangai Mountain Range); Terhiin Tsagaan, Chuluut River, Sangiin Dalai, Telmen Lakes (Tarvagatai-Bulnai Mountains); Erhil Lake, Eg River (Hövsgöl Mountain Range); Orkhon, Selenge Rivers (Orkhon-Selenge River basins); Tuul, Onon, Balj River valleys (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz River and Yakhi, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriiin Tsagaan, Delger Tsagaan Lakes (Mongol Daguur Steppe); Khalkh, Degee, Nömrög Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, Taatsyn Tsagaan, Adgiin Tsagaan Lakes (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi); all small lakes in the Northern Gobi; Zakhui oasis (Trans-Altai Gobi Desert). This species migrates through the breeding territories and especially at Great Lake Depression, Valley of the Lakes, Zavkhan, Orkhon, Herlen, Tuul, Ulz and Khalkh Rivers, where it migrates in large numbers (Dorogostaiskii, 1908; Kozlova, 1930; Bold, 1973; Skryabin & Sumiya, 1976; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stenzel *et al.*, 2005; Boldbaatar 2006; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 580,000-710,000 mature individuals. Global breeding and resident ranges are estimated at 9,390,000 km² in the World (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species a fairly common breeding visitor. They arrive in breeding sites by late March-late April. Breeding begins in late April-early May, and continues to August. Breeding pairs nest in a burrow, in dunes or similar site, or under thickets, in concealed hollow trees, under rocks, buildings or similar (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a hollow with little plant material, but well lined with down and a few feathers. Clutch size varies from 7 to 13. Female incubates the eggs alone for 28-30 days. Male remains by but not in burrow. Young, soon after hatching, led to nearest water and mudflat feeding site by both adults. The young can dive to avoid predators when quite small; adults do not. They live independent at c. 8 weeks. Summering birds are found in large freshwater lakes and ponds in summer. On migration, it forms flocks of 9-1,000 individuals and feeds on aquatic and terrestrial green plants in the lake and wet meadows and marshes. The flocks also occur in wheat field together with Ruddy Shelduck on autumn migration. In breeding season, they feed on insects, worms, fishes and frogs. They leave the breeding site for wintering grounds by late August - late September.

Habitat Type: 5. Wetlands (inland) (5.1.-5.9., 5.11., 5.13.- 5.17.); 6. Rocky areas near lakes and rivers; 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.7., 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/, 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/, 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/, 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities. This species is one of the main prey of Saker Falcon in Mongolia (Gombobaatar, 2006)/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/, 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

25. Scientific Name: *Aix galericulata*

Species Authority: (Linnaeus, 1758)

Common Names: Mandarin Duck (English), Mandir urankhajin or khalzan angir (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: United Kingdom, Belgium, Netherlands, Austria, Slovenia, Russian Federation, India, China, Nepal, Mongolia, Myanmar, Thailand, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species has been recorded at Tashgain Tavan Lake and Khalkh River. This species may breed at Buir Lake-Khalkh River-Khyangan region (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000). Two males were recorded by P.Amartuvshin (Mongolian Ornithological Society), H. Brown (Steppe Forward Programme) and P.Gankhuyag in waste water pond near Ulaanbaatar (west of the city) on 8 May, 2010 (P.Amartuvshin pers. comm.). A female was photographed by A.Bräunlich at Ih Nart Nature Reserve of Dornogobi province on 8 May, 2010 (A.Bräunlich pers. comm. and photographs).

Population: The global population consists of 65,000 - 66,000 mature individuals. Global breeding and resident ranges are estimated at 1,910,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this species is a summer visitor. This species may breed in the valley of Khalkh and Nömrög River valley. In the wild, Mandarin Ducks breed in densely wooded areas near shallow lakes, marshes or ponds. They nest in cavities in trees, or on the ground under thick bushes or fallen trees close to water. Often an individual perches on tree branches, especially when searching for a nesting hollow. It feeds on invertebrates (insects), plant seeds, often acorns, less frequently fish and spawn (MacKinnon & Phillipps, 2000; BirdLife International, 2011). In Mongolia, individuals occur singly or in pairs in large river valleys in the east. However, recently it was recorded in central and south Mongolia. From the records, the species passes through the country by early May.

Habitat Type: 1. Forest (1.4. Temperate near lakes and rivers near only on migration); 5. Wetlands (inland) (5.1., 5.2., 5.5.-5.9., 5.14.-5.17.).

Dominant threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/ 1.3.3. Wood-1.3.3.1. Small-scale subsistence /logging for a fuel and constructing materials/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species moults/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 4. Accidental mortality- 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds,

islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /most abundant avian carnivores such as Steppe Eagle, Golden Eagle and White-tailed Eagle prey upon individuals on migration/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 23.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

26. Scientific Name: *Anas strepera*

Species Authority: Linnaeus, 1758

Common Names: Gadwall (English), Bor nugas (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Cuba, Cayman Islands, Jamaica, Haiti, Bahamas, Turks and Caicos Islands, Puerto Rico, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Senegal, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Viet Nam, Singapore, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands, Marshall Islands. It is regionally extinct in Kiribati.

Regional Distribution: This species breeds at Khoton, Khorgon, Döröö, Tolbo, Dayan, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Khovd and Böhmörön River valleys (Kharkhiraa and Turgen Mountains); Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan River valley (Desert steppe depression in Zavkhan); Tamir, Ider, Chuluut and Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Tui and Baidrag Rivers and many small lakes (South Khangai Plateau, Khan Höhii range); Terhiin Tsagaan, Sangiin Dalai, Telmen, Khar Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake (Darkhad Depression); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Terelj,

Onon, Balj, Huder, Bulnai Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz, Döch, Khariin Rivers and Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Mongol Daguur Steppe); Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga, Galdastai Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar Lakes, Tashgain Tavan Lake, Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, Taatsyn Tsagaan Lakes and Tsagaan, Urt Rivers (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi); Zakhui and other oases (Trans-Altai Gobi Desert). It migrates though the breeding areas and small steppe lakes of northern and eastern Gobi (Zamyn-Uud). The main moulting areas are Khar-Uls, Khar, Airag, Uvs, Telmen, Erhil, Ögii, Khaichiin Tsagaan, Buir, Tashgain Tavan Lake (Kozlova, 1930; Bold, 1969; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 3,200,000-3,800,000 mature individuals. Global breeding and resident ranges are estimated at 18,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a common breeding visitor. Most breeding and summering individuals arrive in Mongolia by mid-April-early May, depending on weather conditions. Breeding begins in late April-early May. Breeding pairs are found in freshwater lakes, pond, pools and small lakes and slow streams with reed beds and tall sedges in lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a hollow lined with plant material, down and some feathers. Down tufts dark with small pale centre and distinct pale tips. The female usually lays 8-12 eggs of cream colour or tinted very pale green. The eggs are incubated by the female alone; beginning with completion of clutch. Duration of the incubation is 25-27 days. The female cares for and broods young alone. Just after hatching the female leads the young to nearest water. The young remain together with the female and fledge at c.7 weeks. Both adults and young graze short green plants in wet meadows, marshes and sedge areas near breeding lakes and rivers. They also feed on aquatic plants and invertebrates in water. Family members remain and migrate together to wintering grounds. Non-breeding and moulting individuals stay in areas with dense reeds, tall sedges and surrounded by dense bushes. It forms large migrating flocks consisting of 10-200 individuals that forage in large lakes and ponds from forest steppe to Gobi Desert. They leave their breeding and summering sites for wintering grounds by late August-early October, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and

low breeding success of the species in breeding and non-breeding areas/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza. Gadwall was infected by highly pathogenic avian influenza viruses (H10N6) at Turgen Tsagaan Lake of Dashbalbar of Dornod province in 2009 (Batchuluun & Damdindorj, 2011)./; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 9.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

27. Scientific Name: *Anas falcata*

Species Authority: Georgi, 1775

Common Names: Falcated Duck (English), Gezegt nugas (Mongolian)

Global Status: Near Threatened

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because although it is not currently threatened, it is likely to undergo significant habitat loss and degradation through overgrazing and drought. It is also under threat from poaching. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Portugal, Netherlands, Poland, Malta, Bulgaria, Turkey, Russian Federation, Jordan, Iraq, Islamic Republic of Iran, Kazakhstan, Afghanistan, Pakistan, India, China, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species occasionally breeds at lakes and ponds such as Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); lakes of Orkhon River valley and Ögii Lake (Khangai Mountain Range); Terhiin Tsagaan, Telmen, Erhil Lakes (Tarvagatai-Bulnai Mountains); lakes and ponds in the valleys of Orkhon, Selenge (Orkhon-Selenge River basins), Tuul, Kharaa Rivers (Hentii Mountain Range), Khalkh, and Nömrög Rivers and Buir, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding territories and Hövsgöl Lake, Onon, Balj Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz, Döch Rivers, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Delger Tsagaan Lakes (Mongol Daguur Steppe); Degee, Azarga Rivers and Shavar Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Bööntsagaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes) (Kozlova, 1930; Bold, 1969; Bold, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar,

2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stenzel *et al.*, 2005; Bold & Batsaikhan, 2006; Sumiya, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 89,000 mature individuals. Global breeding and resident ranges are estimated at 4,690,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this species is a rare breeding visitor. Most breeding, summering and migrating birds arrive in the country by mid-April-early May, depending on weather conditions. Breeding begins in late April-early May. Breeding ecology is not well known in the country. Breeding pairs nest in small taiga forest and forest steppe lakes, rivers, channels, and swamps, occasionally in large lakes. The nest is situated in a dry place or hummock, and hidden in bushes, deadwood, or in forest, not far from water. The nest is a hollow lined with nearby vegetation, down and some feathers. Female lays 4-8 eggs of pale creamy white, sometimes greenish or buffish tinged. The female incubates the eggs alone for 22-26? days. The female leads young to water and cares for them. Male remains nearby. Young can find their own food. They feed on aquatic and terrestrial plants in wet meadows, marshes and ponds with short vegetation. Both adults and young birds feed on aquatic invertebrates in water. On breeding season, individuals occur singly or in pairs. Non-breeding or summering birds can be found in small flocks. On migration, they form flocks of 6-20 individuals and can be found in fresh water and saline lakes, large pools and ponds with reed beds and tall sedges. They also visit wheat fields in autumn. They leave the breeding and summering sites for wintering grounds by late August-mid-September.

Habitat Type: (5.1., 5.2., 5.4.- 5.10., 5.13.-5.17., 12.2., 12.6., and 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds/moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.7. Fires: Forest and steppe fires may burn breeding habitats near lakes and rivers. Fires may burn nests with eggs and very rarely young hatchlings.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed by people in public service places.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, H h, H vsg l, and  gii Lakes. Abandoned gill nets along the lake shores are a hazard both to local livestock and this duck.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to eat the meat of this species or to make a stuffed souvenir occasionally shoot it.

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, H vsg l Mountain Ranges, and Eastern Mongolian Plain.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Raccoon Dog (*Nyctereutes*

procynoides) and Grey Wolf (*Canis lupus*) in the region easily prey upon the flightless and slow-moving chicks and moulting individuals at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance- 10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

28. Scientific Name: *Anas penelope*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Wigeon (English), Zeerd nugas or zeerdalag nugas (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Haiti, Venezuela, Dominican Republic, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Senegal, Mauritania, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Ghana, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, Sweden, Western Sahara. This species is considered vagrant in Bermuda, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Burundi, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Marshall Islands, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species breeds at Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); Khar-Uu, Khar, Dörgön Lakes and the delta of Khovd River (Great Lakes Depression); Shishgid, Dood Lake (Darkhad Depression, Hövsögöl). It migrates through these breeding areas and Buyant, Khovd Rivers Khoton, Khorgon, Döröö, Tolbo Lakes (Mongol-Altai Mountain Range); Khyargas, Airag Lakes and the delta of Khovd River (Great

Lakes Depression); Zavkhan and Hungui Rivers (Desert steppe depression in Zavkhan); Tamir, Ider and Chuluut Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Telmen, Khar Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Terelj, Onon, Balj, Huder, Bulnai Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz, Döch Rivers and Yakhi, Bayan-Erhet, Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Mongol Daguur Steppe); Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar Lakes, Tashgain Tavan Lake, Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, Taatsyn Tsagaan Lakes and Tsagaan, Urt Rivers (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi); small steppe lakes of northern Gobi and south of eastern Gobi Depression (Tugarinov, 1916; Kozlova, 1930&1932; Bold, 1969; Bold, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Tungalag, 1983; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 2,800,000 - 3,300,000 mature individuals. Global breeding and resident ranges are estimated at 16,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and summering individuals arrive in breeding and summering sites by mid-April-early May. Breeding begins in late April-early May. It nests on the ground in reed beds, tall sedge grassy areas near ponds, pools, and freshwater lakes and river deltas, and on lake islands (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a hollow lined with nearby vegetation, down and some feathers. Down tufts dark brown with paler centres and tips, the latter not as pale as those of Garganey. The female usually lays 7-8, rarely 6-10 eggs of creamy white. The eggs are incubated by the female alone, beginning with last egg for 22-25 days. The female leads the young to the nearest water and cares for them. The young live independently at c. 6 weeks. They graze in wet meadows, marshy areas with short vegetation and near rivers banks. They forage aquatic plants and insects in water. Families stay and migrate together. On migration, they visit wheat fields with Pintails, Gadwall and Eurasian Teals. Summering and moulting birds remain in large pools, ponds, branches of large rivers, and freshwater lakes with reed beds and tall sedges in small loose flocks. On migration it forms flocks of 9-130 individuals and occurs in the breeding habitats, large fresh-water, brackish and saline lakes, river deltas, large pools and ponds, natural and artificial ponds and channels, wheat fields and oases for foraging and resting from taiga forest to Gobi Desert, and lake shores, river banks, islands, and sand bars for resting and roosting. They leave their breeding and summering ground by late August-early October.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental

mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities. This is also one of the prey species of Saker Falcon in Mongolia (Gombobaatar, 2006/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

29. Scientific Name: *Anas platyrhynchos*

Species Authority: Linnaeus, 1758

Common Names: Mallard (English), Zerleg nugas (Mongolian)

Subspecies in Mongolia: *A. p. platyrhynchos* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Jamaica, Haiti, Bahamas, Turks and Caicos Islands, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Falkland Islands (Malvinas), Saint Vincent and the Grenadines, Martinique, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Senegal, Mauritania, Gambia, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait,

Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Viet Nam, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, Northern Mariana Islands, Micronesia, Marshall Islands, Vanuatu, New Zealand, Cook Islands, Democratic People's Republic of Korea, Republic of Korea, Kiribati. This species was introduced to, and is possibly extinct in New Caledonia.

Regional Distribution: This species breeds at Buyant, Khovd Rivers and Khoton, Khorgon, Döröö, Tolbo, Dayan, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Khovd and Böhömörön Rivers (Small lakes and rivers) (Kharkhira and Turgen Mountains); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers (Desert steppe depression in Zavkhan); Tamir, Ider, Chuluut and Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Tui and Baidrag Rivers and many small lakes (South Khangai Plateau); Terhiin Tsagaan, Ider and Chuluut Rivers, Sangiin Dalai, Telmen, Khar Lakes with wide shores and valleys (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Terelj, Onon, Balj, Huder, Bulnai Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz, Döch, Khariin Rivers and Yakhi, Bayan-Erhet, Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Mongol Daguur Steppe); Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga, Galdastai Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar Lakes, Tashgain Tavan Lake, Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, Taatsyn Tsagaan Lakes and Tsagaan, Urt Rivers (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi). It migrates through these breeding territories and other rivers and lakes in natural zones (except for alpine meadow, deep taiga) and oasis of Zakhui in Trans-Altai Gobi Desert. Moulting areas in high density are Khar-Us, Khar, Erhil, Buir and Tashgain Tavan Lake (Kozlova, 1930; Bold, 1969; Skryabin & Sumiya, 1976; Samiya, 1978; Erdenebat, 1989; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). This species winters in open waters of Khar-Us, Khar, Airag, Uvs, Terhiin Tsagaan Lakes and Chono Kharaiikh, Orkhon, Zavkhan, Tatkhon Teel, Tuul Rivers and Yamyn Khooloi (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004).

Population: The global population consists of 19,000,000 mature individuals. Global breeding and resident ranges are estimated at 36,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and wintering species. Most breeding and migrating individuals arrive from wintering ground by late early-mid-April. Breeding begins in late April-mid-May. They nest on the ground in areas with reed beds, tall vegetation and dense bushes on small islands, or near rivers and lakes (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The female builds the nest that is a hollow lined with plant debris, leaves, grass, etc. Down covers eggs before incubation and when bird is away from the nest. The female normally lays 10-12, occasionally 7-16 eggs with waxy rather than glossy pale green, blue-green, or sometimes creamy white colour with green tinge. The eggs are incubated by the female alone for 28-29 days. Soon after hatching, the young head to water and are mostly tended by female alone. They fledge at c. 7-8 weeks. They feed mainly on vegetable matter, which is usually obtained by upending (tipping head first into the water, so that the tail remains visible above the surface). Migrating birds gather in wheat fields on autumn migration and feed on wheat grains with other ducks. It forms flocks of 12-600 individuals and forages in open water of large freshwater lakes and pools, marshes, and other wetlands on migration. They are also found in pairs on migration. They leave the breeding site for wintering grounds by late August-early October. This species also winters in unfrozen open waters at Khar-Us, Khar, Airag, Uvs and Terhiin

Tsagaan Lakes; and Chono Kharaiikh, Orkhon, Zavkhan, Tatkhan Teel, Tuul Rivers and Yamyn Khooloi (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004).

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4., 5.5.-5.10., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic: In winter, livestock of local families drink fresh water in the unfrozen open water where they roost and feed at midday. Drinking water of local families, their livestock and wintering site of the species overlap along some lakes and rivers in winter and spring, summer and autumn. According to our field survey, birds move to unfrozen open water sites in close proximity to lake and river valleys while cattle come to the site in the morning in winter. It is not likely to be a dangerous threat for wintering ducks in Mongolia. But detailed field survey of the subject is required (Gombobaatar, 2004). Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. The overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Forest and steppe fires may burn breeding habitats near lakes and rivers. Fires may burn nests with eggs and very rarely young hatchlings.

3. Harvesting (hunting or gathering)

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several species of birds, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to eat the meat of this species or to make stuffed souvenirs occasionally shoot it.

4.1.2.3 Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tsevenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

7.3. Temperature extremes: Freezing of open water where wintering Mallards are at high density is a

serious factor in lakes and rivers during cold winters. A cause of mortality for wintering Mallards was becoming stuck on feet or belly (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004).

8. Changes in native species dynamics-8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless and slow-moving chicks and moulting individuals at night. There are records of predation caused by numbness in previous years in Tuul River and Khar-Us Lake National Park. At night, birds usually roost at shallow watersides of the wintering rivers and lakes. Roosting water birds in shallow water may quickly freeze due to a sudden drop in night air temperature. In early morning, carnivores such as Red Fox (*Vulpes vulpes*) and Grey Wolf (*Canis lupus*) in the region easily prey upon the flightless and slowly moving Mallards in frozen rivers and lakes (Bold *et al.*, 1998; Gombobaatar, 2004).

8.5. Pathogens or parasites: Mallard was infected by highly pathogenic avian influenza viruses (H3N8) at Chukh Lake of Dashbalbar sum of Dornod in 2009 (Batchuluun & Damdindorj, 2011).

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

30. Scientific Name: *Anas poecilorhyncha*

Species Authority: Forster, 1781

Common Names: Spot-billed Duck (English), Zerlegshir nugas (Mongolian)

Subspecies in Mongolia: *A. p. zonorhyncha* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: United States, Russian Federation, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Orkhon and Selenge Rivers (Orkhon-Selenge River basins); Buur, Kharaa, Onon, Balj Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz River and Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Mongol Daguur Steppe); Khalkh, Nömrög Rivers and Buir, Shavar, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas and Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan River (Desert steppe depression in Zavkhan); Tamir River and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Telmen Lakes and Ider River (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Bööntsagaan, Taatsyn Tsagaan Lakes (Valley of the Lakes)

(Kozlova, 1930; Skryabin & Sumiya, 1976; Bold, 1973; (Samiya, 1978)

Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 910,000-1,800,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a breeding visitor. Most breeding and summering individuals arrive in their summering and breeding sites by mid-April-early May. Breeding begins in late April-early May. Breeding The female builds the nest in dense reeds, and areas with tall vegetation near lakes, pools, ponds and rivers (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a hollow lined with plant leaves. Down covers eggs before incubation. The female normally lays 6-9 eggs of whitish with glossy pale green, blue-green tinged colour. The eggs are incubated by the female alone for 27-29? days. Both adults, but predominantly the female care and defend young from predators. The young fledge at c. 7-8 weeks. The young remain and migrate together with parents. They feed mainly on aquatic and terrestrial green plants and occasionally invertebrates in water. It forms flocks of 8-40 individuals and remains together with Mallards and Wigeons on migration. They also visit wheat field in autumn in eastern Mongolia. Most breeding and summering birds leave their breeding and summering sites for wintering grounds by late August - late September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.10., 5.13.- 5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas/, 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*), Raccoon Dog (*Nyctereutes procyonoides*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

31. Scientific Name: *Anas clypeata*

Species Authority: Linnaeus, 1758

Common Names: Northern Shoveler or Shoveler (English), Khalbaga nugas (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and abundance. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Ecuador, Jamaica, Columbia, Haiti, Bahamas, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Burkina Faso, France, Ghana, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, Sweden, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, Guam, Northern Mariana Islands, Micronesia, Marshall Islands, New Zealand, United States Minor Outlying Islands, Democratic People's Republic of Korea, Republic of Korea, Kiribati, French Polynesia. It is regionally extinct in Croatia.

Regional Distribution: It breeds at Uvs Lake and the delta of Tes and Torkholig River valleys (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes at the delta of Khovd River (Great Lakes Depression); Zavkhan River basin (Desert steppe depression in Zavkhan); upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Tui and Baidrag River valleys (South Khangai Plateau); Terhiin Tsagaan, Sangiin Dalai, Telmen Lakes with wide shores and valleys (Tarvagatai-Bulnai Mountains); Shishgid, Dood Lake wetlands (Darkhad Depression); Lower Orkhon, Selenge, Eg, Kharaa, Yeröö River basins (Orkhon-Selenge River basins); Onon, Balj River valleys (Hentii Mountain Range); Herlen River valleys (Middle Khalkh Steppe); Ulz, Döch River basins (Mongol Daguur Steppe), Khalkh, Nömrög Rivers and Buir, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog Lakes (Valley of the Lakes). It migrates through the breeding areas and Bulgan River valley (Dzungariin Gobi), oasis in Trans-Altai Gobi, small steppe lakes in Eastern Mongolian Plain, Northern

and Eastern Gobi (Kozlova, 1930; Bold, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 5,500,000-6,000,000 mature individuals. Global breeding and resident ranges are estimated at 27,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding, summering and migrating birds arrive in breeding sites by mid-April-early May, depending on weather conditions. Breeding begins in late April-early May. Breeding birds breed on fresh water with vegetation at edges, or in overgrown pools, marshes, bogs and ditches (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They nest on an open site by water, usually on a dry site. The nest is a hollow with some shelter from low vegetation, lined with nearby plants, down and some feathers. Down tufts brown with light centres, like Pintail's. The female usually lays 8-12 eggs of creamy-buff or olive-tinted. The female incubates the eggs for 26 days. The female broods young and leads them to water after hatching. The young live independently at c. 6-7 weeks. The young remain in family group and migrate to wintering grounds. Both adults and young graze in wet meadows, and marshy areas with short vegetation near breeding site. They also forage aquatic plants and insects in water. On migration, mixed groups of the species with Pintail and Shoveler feed on wheat grains in wheat fields. Summering and moulting birds remain in large pools, ponds, branches of large rivers, and freshwater lakes with reed beds and tall sedges. Large numbers of moulting ducks were seen at Khar-Us Lake (Great Lake Depression), Khaichiin Tsagaan Lake (Herlen-Ulz River basins), and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region). On migration, it forms flocks of 10-200 individuals and occurs in the breeding sites, large fresh-water, brackish and saline lakes, river deltas, large pools and ponds, and wheat fields and oases for foraging and resting from forest steppe to Gobi Desert, and lake shores, river banks, islands, and sand bars for resting and roosting. They leave their breeding and summering ground by late August-early October, depending on weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas/, 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water

pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities. This is one of the prey species of Saker Falcon in Mongolia (Gombobaatar, 2006)/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.
Conservation Measures: Approximately 8.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

32. Scientific Name: *Anas acuta*

Species Authority: Linnaeus, 1758

Common Names: Northern Pintail or Pintail (English), Shovtgoralag nugas (Mongolian)

Subspecies in Mongolia: *A. a. acuta* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Jamaica, Columbia, Haiti, Bahamas, Brazil, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Suriname, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, French Southern Territories, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea,

Cook Islands, Kiribati, Republic of Korea, Japan, Palau, Papua New Guinea, Northern Mariana Islands, Micronesia, Marshall Islands, Tonga, French Polynesia.

Regional Distribution: This species breeds at Uvs Lake and the delta of Tes River (Northern Uvs Depression); Khar-Us, Khar, Dörgön Lakes and the delta of Khovd River (Great Lakes Depression). It migrates through river valleys and lakes in the Mongol-Altai Mountain Range, Great Lakes Depression, Desert steppe depression in Zavkhan, Khangai Mountain Range, Hövsgöl Mountain Range, Darkhad Depression, Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe, Mongol Daguur Steppe and Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Dzungariin Gobi, and Northern Gobi (steppe lakes). High concentrations of moulting occur in Achit Lake (Mongol-Altai Mountain Range), Oigon, Telmen, Terhiin Tsagaan, and Ögii Lakes (Khangai and Hentii Mountain Range) (Kozlova, 1930; Bold, 1969; Bold, 1973; Skryabin, 1975; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 5,300,000-5,400,000 mature individuals. Global breeding and resident ranges are estimated at 28,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a breeding visitor. Most summering and breeding birds arrive in their breeding and summering sites by mid-April-early May. Breeding begins in late April-early May. Breeding pairs breed at freshwater lakes, pools and lagoons; usually with drier margins with low vegetation, heather and grasses near water, or on islands (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is placed on the ground, and is a hollow; exposed or concealed in low vegetation, lined with plant material, down and some feathers. Down tufts longish, light brown with pale centres, like Wigeon's. The female usually lays 7-9 eggs of yellowish-creamy white to greenish to bluish colour. The eggs are incubated by the female only, beginning with completion of clutch for 25-26 days. The females care for the young and leads them to the nearest suitable water. Male remains nearby. The young remain together with the female and fledge at c.7 weeks. Fully grown young and parents graze in wet meadows, and marshy areas with short vegetation. They forage aquatic plants and insects in water. On migration, they feed on wheat grains in wheat fields with other ducks. Summering and moulting birds remain in large pools, ponds, branches of large rivers, and freshwater lakes with reed beds and tall sedges in small loose flocks. On migration, it forms flocks of 10-120 individuals and occurs in the breeding habitats, large fresh-water, brackish and saline lakes, river deltas, large pools and ponds, natural and artificial ponds and channels, wheat fields and oases for foraging and resting from taiga forest to Gobi Desert, and lake shores, river banks, islands, and sand bars for resting and roosting. They leave their breeding and summering ground by late August-early October, depending on weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of

birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

33. Scientific Name: *Anas querquedula*

Species Authority: Linnaeus, 1758

Common Names: Garganey (English), Tsagaanhömsögt nugas (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Puerto Rico, Barbados, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island Indonesia, Thailand, Malaysia, Lao

People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Democratic People's Republic of Korea, Republic of Korea, Zimbabwe, This species is considered a vagrant in Australia.

Regional Distribution: This species breeds at Khar-Uus, Khar, Dörgön Lakes (Great Lakes Depression); Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Tui and Baidrag River valleys (South Khangai Plateau); Terhiin Tsagaan, Sangiin Dalai, Telmen Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Lower Orkhon, Selenge Rivers (Orkhon-Selenge River basins); Onon, Balj River basins (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz, Döch River basins (Mongol Daguur Steppe); Khalkh, Nömrög Rivers and Buir, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog Lakes (Valley of the Lakes). It migrates through the breeding areas and Uvs Lake and Tes River, Bulgan River valley (Dzungariin Gobi), small steppe lakes in Northern and Eastern Gobi (Kozlova, 1930; Bold, 1973; Sumiya, 1973; Skryabin, 1975; Skryabin & Sumiya, 1976; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 2,600,000-2,800,000 mature individuals. Global breeding and resident ranges are estimated at 16,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in summering and breeding sites by mid-April-early May. Breeding begins in late April-mid-May. It nests on the ground in shallow fresh water with vegetation, shallow lakes, pools, and meadow ditches. The nest is concealed in long grass or rushes near water (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a hollow lined with plant material, down and some feathers. Down tufts smaller than Teal's with white centres and characteristic white tips. Outer nest diameter is 20 cm and depth of the nest is 9 cm (Sumiya & Skryabin, 1989). The female usually lays 8-11 eggs of creamy- buff without greenish tints. The eggs are incubated by the female only for 21-23 days. The female broods young and lead them to nearest water. The young fledge in 5-6 weeks. Young remain in family group. The family group grazes in wet meadows, and marshy areas with short vegetation. They also forage aquatic plants and insects in water. On migration, they feed on wheat grains in wheat fields with other ducks. Summering and moulting birds remain in large pools, ponds, branches of large rivers, and freshwater lakes with reed beds and tall sedges in pairs and small flocks. On migration it forms flocks of 10-60 individuals and occurs in the breeding habitats, large fresh-water, brackish and saline lakes, river deltas, large pools and ponds, channels, and wheat fields and oases for foraging and resting from taiga forest to Gobi Desert, and lake shores, river banks, islands, and sand bars for resting and roosting. They leave their breeding and summering ground by late August-early October, depending on weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds,

including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

34. Scientific Name: *Anas formosa*

Species Authority: Georgi, 1775

Common Names: Baikal Teal (English), Baigaliin nugas (Mongolian)

Global Status: Vulnerable, A3c

Regional Status: Vulnerable, A2 (a, c); C

Rationale for Assessment: This species has assessed as Vulnerable. The population size is unknown but may qualify for a threat category; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Spain, France, Netherlands, Italy, Svalbard and Jan Mayen, Malta, Russian Federation, Kazakhstan, Uzbekistan, Pakistan, India, China, Nepal, Mongolia, Myanmar, Thailand, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan. It is considered vagrant in Bangladesh. Its presence and origin are uncertain in Afghanistan.

Regional Distribution: The species migrates along Ih Dalbaa of Khankh in Hövsgöl (groups of six and four individuals (possibly the same birds) seen at two localities 15 -20 km apart in July 1995, neither group appearing to be breeding there); Steppe lake west of Lun sum of Töv province in June, 2000 (a male); Orkhon and Selenge Rivers, Tsagaan Lake Stenzel *et al.*, 2005; (Orkhon-Selenge River basins); the lower Onon, Balj, Herlen Rivers (Hentii Mountain Range); Ulz, Döch Rivers and Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Mongol Daguur Steppe); Khalkh, Nömrög Rivers and Buir, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); (Hövsgöl Mountain Range) (Bold, 1973; Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Harper 1996; Bold, 1997; Sumiya *et al.*, 2000;

Tseveenmyadag *et al.*, 2000; BirdLife International, 2001; Sumiya, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 500,000-700,000 mature individuals. Global breeding and resident ranges are estimated at 2,160,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this is a rare passage migrant. Migrating birds pass through eastern Mongolia from the end of April to beginning of June. Only immature individuals on autumn migration were seen in eastern Mongolia by early September and mid-October. Migrating birds stay together with Garganey and Northern Pintails in fresh water and saline lakes on migration. They are also found in freshwater pools and ponds in the valley of large lakes and rivers in the east. They feed on aquatic and terrestrial plants and roots. Passage migrants forage wheat grain on autumn migration in eastern Mongolia together with the ducks.

Habitat Type: 5. Wetlands (inland) (5.4.-5.8., 5.13. -5.16.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species refuels, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir Lake. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important stopover and refueling sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their resting and refueling habitats in the Eastern Mongolian Plain.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1995. Listed in CITES Appendix II. It is covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001 (Gombobaatar *et al.*, 2003; Gombobaatar, 2004). Approximately 9.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

35. Scientific Name: *Anas crecca*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Teal, Teal, Common Teal or Green-winged Teal (English), Nogookhon nugas (Mongolian)

Subspecies in Mongolia: *A. c. crecca* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Egypt, El Salvador, Eritrea, Estonia, Ethiopia, Canada, United States, Mexico, Guatemala, Belize, Honduras, Costa Rica, Cuba, Cayman Islands, Jamaica, Columbia, Haiti, Bahamas, Puerto Rico, Virgin Islands, U.S., Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Ghana, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Belarus, Turkey, Moldova, Russian Federation, Tanzania, Uganda, Cyprus, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands.

Regional Distribution: This species breeds at Khovd River and Khoton, Khorgon, Tolbo, Dund Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan River (Desert steppe depression in Zavkhan); Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Telmen, Khar Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake (Darkhad Depression); Orkhon, Selenge, rivers (Orkhon-Selenge River basins); Onon, Balj Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz, Döch Rivers, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, and Delger Tsagaan Lakes (Mongol Daguur Steppe); Khalkh, Degee, Nömrög, Azarga Rivers and Buir, Shavar Lakes, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan and Taatsyn Tsagaan Lakes (Valley of the Lakes) in the breeding season and on migration. It moults in high numbers in Oigon Lake (Western Khangai) (Kozlova, 1930 & 1932; Bold, 1969; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar,

2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). It winters in open water of the Orkhon River (Molleson, 1896).

Population: The global population consists of 5,900,000 - 6,900,000 mature individuals. Global breeding and resident ranges are estimated at 31,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and summering birds arrive in the breeding sites by mid-April-early May. Breeding begins in late April- early May. It nests in reed beds, tall sedge grassy and bushy areas near streams, bogs ponds, pools, rivers and lakes (Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a hollow concealed in ground vegetation- bushes, sometimes in a raised marsh tussock, lined with leaves and nearby plant material, down and some feathers. Down tufts small and very dark, with white centres. The female usually lays 8-12 eggs of pale creamy to pale olive-buff. The female incubates the eggs for 23-24 days. Males remain nearby. Both sexes, but predominantly the female care for and brood young for 23 days. They can fly at c.44 days. The young remain together with parents after breeding season and migration as well. Both adults and young graze green plants in wet meadows, marshes and pools with shallow water and short plants. In summer, they also feed on water invertebrates in water. Non-breeding birds and migrating birds are found near lakes with undergrowth, rivers with slow current, ponds, and swamps, often near large temporary puddles, floods, ditches, and peat quarries in large numbers. It forms flocks of 10-600 individuals, occurring in all types of wetlands from taiga forest to Gobi Desert. In wetlands of steppe, desert steppe, and Gobi Desert, the number of birds are fewer than in the northern part of the country on migration. On migration they also forage wheat grain in wheat fields, joining with Garganey and Northern Pintails. Most summering and breeding birds leave their summering and breeding site for wintering grounds by late August-late September in Mongolia. Late migrants can occur early October.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.- 5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /in winter, livestock of local families drink fresh water in the unfrozen open water where they roost and feed at midday. Drinking water of local families, their livestock and wintering site of the species overlap along Orkhon River in winter. It is not likely to be a dangerous threat for wintering teals in Mongolia. But detailed field survey of the subject is required (Gombobaatar, 2004). Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species breeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and

species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./, 7.3. Temperature extremes /freezing of open water where wintering Teals are at high density is a serious factor in lakes and rivers during the cold winter. A cause of mortality for wintering Teals was getting the feet or belly stuck in quickly-forming ice (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004); 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

36. Scientific Name: *Netta rufina*

Species Authority: (Pallas, 1773)

Common Names: Red-crested Pochard (English), Ulaankhushuut bivaan or ulaankhushuut shumbuur (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Armenia, Islamic Republic of Iran, Kazakhstan, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Japan.

Regional Distribution: This species breeds at Achit Lake (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khomyn Khooloi (Great Lakes Depression); Zavkhan River (Desert steppe depression in Zavkhan); valleys of Tamir and upper Orkhon Rivers, Ögii Lakes (Khangai Mountain Range); Bööntsagaan, Orog Lakes (Valley of the Lakes). Non-breeding birds were seen in the breeding areas and Buyant, Khovd Rivers and Khoton, Khorgon, Döröö, Tolbo, Uureg Lakes (Mongol-Altai Mountain Range); Tamir, Khanui Rivers and Sangiin Dalai Lake (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Telmen Lakes (Tarvagatai-Bulnai

Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Lower Orkhon, Selenge, Eg Rivers (Orkhon-Selenge River basins); Onon, Balj, Ulz River basins on migration. It moults at Uvs, Khar-Us Lakes (Great Lakes Depression) and Telmen Lake (Khangai and Hentii Mountain Range) (Kozlova, 1930; Bold, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 420,000 - 440,000 mature individuals. Global breeding and resident ranges are estimated at 6,140,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding, summering and migrating individuals arrive in Mongolia by mid-April-early May, depending on weather conditions. Breeding begins in late April-early May. It breeds in freshwater pools with vegetation cover, in thickets, reed beds, sedge beds, or on small islands. The nest is well concealed in cover, usually at the end of a tunnel formed by growing vegetation. The nest is a hollow with a lining of nearby vegetation with down and feathers. Down tufts brownish with small pale centres. The female usually lays 6-12, very rarely up to 21 (but this may involve two females) eggs of light creamy to pale green colour. The female incubates the eggs alone for 26-28 days. The female broods young and leads young to water after hatching. They fledge in c. 6-7 weeks. It feeds by diving or tipping over, like river ducks. They feed exclusively on leaves, sprouts of water plants, and algae. In breeding season, the species occurs in pairs in freshwater lakes, and rivers, pools and ponds with tall reed beds, and marshes. It forms flocks consisting of 8-46 birds and occurs in large fresh water, brackish, and saline lakes on migration. Summering birds remain in large freshwater lakes and slow running rivers. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6., 12.9.).

Dominant threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water / ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites / highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

37. Scientific Name: *Aythya ferina*

Species Authority: (Linnaeus, 1758)

Common Names: Common Pochard or Pochard (English), Ulaanhuzuut shumbuur (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution across Mongolia and common occurrence. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Burkina Faso, France, Ghana, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Viet Nam, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Guam.

Regional Distribution: It breeds at Achit Lake (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes River (Northern Uvs Depression); Khar-Uus, Khar, Dörgön Lakes, Khomyn Khooloi (Great Lakes Depression), Zavkhan River valley (Desert steppe depression in Zavkhan); from upper Orkhon River valley to Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Telmen Lakes and their valleys (Tarvagatai-Bulnai Mountains); Bööntsagaan, Orog Lakes (Valley of the Lakes). It migrates through the breeding areas and lakes in the Mongol-Altai Mountain Range, Great Lakes Depression, Khangai Mountain Range, Hövsgöl Mountain Range, Darkhad Depression, Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe, Herlen-Ulz River basins, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Dzungariin Gobi, Trans-Altai Gobi. It moults in Achit Lake (Mongol-Altai Mountain Range), Uvs, Khar-Uus, and Khar Lakes (Great Lakes Depression), Ögii Lake (Khangai Mountain Range), Bööntsagaan Lake (Valley of the Lakes) (Kozlova, 1930; Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 2,200,000 - 2,500,000 mature individuals. Global breeding and resident ranges are estimated at 16,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding, summering and migrating individuals arrive in Mongolia by mid-April-early May. Breeding begins in late April-mid-May. Breeding pairs breed on freshwater lakes, pools and slow-moving streams, with thick waterside vegetation. Nest site is usually situated at water's edge or in water with nearby vegetation used as substrate (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They build their nest up as a heap of nearby plant material in vegetation growing in water. Lined with down and feathers. Down tufts large; brown with pale centres. Female lays 6-11, occasionally up to 18 eggs of a non-glossy pale greenish to greenish-grey, occasionally tinged with buff. The female incubates the eggs alone for 24-26 days. The female broods and cares for young for 7-8 weeks. Both adults and young feed on leaves, seeds, roots of water plants and aquatic invertebrates (insects, larvae, small crustaceans, molluscs). Males gather for molting on large brackish or freshwater lakes. Non-breeding or summering birds occur in large lakes and large ponds in flocks of 10-500 individuals. On migration, it forms flocks consisting of 20-2,000 individuals foraging in fresh-water, brackish and saline lakes, and large river deltas. The flocks rest and roost on lake shores, river banks, islands and sand bars. They leave Mongolia for wintering grounds by late August-early October, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.4.- 5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) prey upon the flightless chicks and moulting individuals at night/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

38. Scientific Name: *Aythya nyroca*

Species Authority: (Güldenstädt, 1770)

Common Names: Ferruginous Duck or Ferruginous Pochard (English), Undar shumbuur or undar nuden shumbuur (Mongolian)

Global Status: Near Threatened

Regional Status: Vulnerable, C.

Rationale for Assessment: This species has assessed as Vulnerable. The population size is unknown but may qualify for a threat category; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Cape Verde, Senegal, Mauritania, Morocco, Sierra Leone, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Burkina Faso, France, Ghana, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Belarus, Egypt, Turkey, Moldova, Russian Federation, Uganda, Cyprus, Ethiopia, Israel, Saudi Arabia, Palestinian Territory, Occupied, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Viet Nam, Hong Kong, Japan, This species' presence and origin are uncertain in Cameroon and Togo.

Regional Distribution: This species is found at Bulgan River (Mongol-Altai Mountain Range), and Khar-Us Lake (Great Lake Depression); Ögii Lake (Khangai Mountain Range); Bööntsagaan Lake (Valley of the Lakes) on migration (Piechocki *et al.*, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Tseveenmyadag *et al.*, 2005; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Bold & Batsaikhan, 2006; Boldbaatar, 2008). Three birds were seen on Baga Lake shore of Uvs Lake Depression 08 July, 1991 (Archimaeve-Ozerskaya & Zabelin, 2010) and a single bird was seen at Darkhad Depression of Hövsgöl region (N. Tseveenmyadag pers. comm.).

Population: The global population consists of 160,000 - 257,000 mature individuals. Global breeding and resident ranges are estimated at 3,610,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a summer visitor and passage migrant. Several individuals of the species were found in several lakes in the west and south of the country during the migration. Migrating birds arrive in Mongolia by late April-early May. Migrants pass through the areas by late August-early September. Individuals occur singly or in pairs in fresh-water, brackish and saline lakes, large pools and ponds with reeds and sedges in the country. They feed mostly on aquatic plants in water. They rest and roost on lake shores and river banks with Tufted Duck and Common Pochard.

Habitat Type: 5. Wetlands (inland) (5.1., 5.4.-5.9., 5.13-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining

/gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality /; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Saker Falcon and Peregrine Falcon prey upon/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 47.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

39. Scientific Name: *Aythya baeri*

Species Authority: (Radde, 1863)

Common Names: Baer's Pochard (English), Ukhaa shumbuur (Mongolian)

Global Status: Endangered

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Russian Federation (Amur), Pakistan, India, China (Heilongjiang), Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Viet Nam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: In Mongolia, records (by province) are as follows: Tsogiin Tsagaan Lake of Dashbalbar sum in Dornod province; Mongol Daguur Strictly Protected Area (a very rare summer visitor); Khalkh Gol and Tashgain Tavan Lake (Fomin & Bold, 1991); Khalkh River basin (Fomin & Bold, 1991); Buir Lake (Fomin & Bold, 1991); Nömrög River basin; Guu and Azraga Rivers on migration (unspecified years) (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold, 1997; Tseveenmyadag, 1998; Tseveenmyadag *et al.*, 2000; BirdLife International, 2001).

Population: The global population consists of 5,000 mature individuals. Global breeding and resident ranges are estimated at 1,640,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Breeding record has not been confirmed in Mongolia.

Feeding and migrating ecology of the species in Mongolia is still unknown. Individuals occur or in pair in eastern Mongolia by late April-early May (spring migration) and late August-early September (autumn migration), depending on food availability and weather conditions. It was found in fresh water and brackish lakes, and the delta of rivers. Feeding behavior is similar to other pochards. They feed on aquatic plants.

Habitat Type: 5. Wetlands (inland) (5.1., 5.4.-5.9., 5.13.-5.17).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species occurs/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming / ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /most abundant avian predators such as Saker Falcon and White-tailed Eagle prey on the species/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 22.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

40. Scientific Name: *Aythya fuligula*

Species Authority: (Linnaeus, 1758)

Common Names: Tufted Duck or Tufted Pochard (English), Gezegt shumbuur (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Greenland, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Morocco, Sierra Leone, Mali, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Belarus, Turkey, Russian Federation,

Tanzania, Uganda, Egypt, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, This species is considered vagrant in Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Yemen, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Northern Mariana Islands, Micronesia, Marshall Islands.

Regional Distribution: This species breeds at Khovd River; Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes River (Northern Uvs Depression); Khar-Uus, Khar and Dörgön Lakes (Great Lake Depression); Zavkhan River valley (Desert steppe depression in Zavkhan); Tamir and upper Orkhon River valleys and Sangiin Dalai and Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai and Telmen Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Lower Orkhon, Selenge, Yeröö Rivers (Orkhon-Selenge River basins); Herlen River valley (Middle Khalkh Steppe), Ulz River basin (Mongol Daguur Steppe); Bööntsagaan, Orog and Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi). It migrates through the breeding areas and from Mongolian-Altai to the eastern country border; from Darkhad Depression to Bulgan River (Mongol-Altai Mountain Range), Valley of the Lakes and valleys of Tuul and Herlen Rivers (Kozlova, 1930; Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009). Only a few birds rarely winter in open water of the lakes in Hövsgöl areas and Uvs Lake Depression (Zabelin, 1996; Sumiya, 2002; Gombobaatar, 2004).

Population: The global population consists of 2,600,000 - 2,900,000 mature individuals. Global breeding and resident ranges are estimated at 20,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding, summering and migrating individuals arrive in Mongolia by mid-April-early May. Breeding pairs breeds by fresh water, on islands in lakes or by small pools. The nest is situated on dry ground, and sometimes found in a breeding colony of the Mongolian Gull near water, under low shrubs or in long vegetation (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a hollow lined with grasses, down and feathers. Down tufts sooty-brown with indistinct pale centres. Female lays 5-12, occasionally 14 eggs of a non-glossy pale- green to greenish-grey colour. The female incubates the eggs for 23-25 days longer at times. The female cares for and broods young and leads them to water after hatching. The young are able to dive in a few hours and to fly at c. 6 weeks. The young fledge in 5-6 weeks. The female remains together with young in family group. The family group forage aquatic plants and insects in water. The family group occasionally grazes in wet meadows, and marshy areas with short vegetation. On migration, they feed on wheat grains in wheat fields with other ducks. Summering and moulting birds remain in large pools, ponds, branches of large rivers, and freshwater lakes with reed beds and tall sedges in pairs and small flocks. On migration it forms flocks of 7-2,000 individuals and occurs in the breeding habitats, large fresh-water, brackish and saline lakes, river deltas, large pools and ponds, channels, and wheat fields and oases for foraging and resting from taiga forest to Gobi Desert, and lake shores, river banks, islands, and sand bars for resting and roosting. They leave their breeding and summering ground by late August-early October, depending on weather conditions. Few birds rarely winter in open water of the lakes in Hövsgöl region and Uvs Lake depression (Zabelin, 1996; Sumiya, 2002; Gombobaatar, 2004; Archimaeve-Ozerskaya & Zabelin, 2010).

Habitat Type: 5. Wetlands (inland) (5.1.- 5.9. (on migration), 5.10. (on migration), 5.13.- 5.17.); 12. Artificial – Aquatic (12.1., 12.2., 12.6.).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /in winter; livestock of local families drink fresh water in the unfrozen open water where they roost and feed at midday. Drinking

water of local families, their livestock and wintering site of the species overlap along some lakes and rivers in winter and spring, summer and autumn. According to our field survey, birds move to unfrozen open water sites in close proximity to lake and river valleys while cattle come to the site in the morning in winter. It is not likely to be a dangerous threat for wintering ducks in Mongolia. But detailed field survey of the subject is required (Gombobaatar, 2004). In summer, overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/;

1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/;

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/;

1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/;

3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/;

3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/;

4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.2.3 Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success of the species in breeding and non-breeding areas/;

4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/;

6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/;

6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/;

7. Natural disasters- 7.1. Drought /see 6.1.1./;

7.3. Temperature extremes /freezing of open water where wintering Tufted Ducks are at high density is a serious factor in lakes and rivers during cold winters. A cause of mortality for wintering individuals was becoming stuck on feet or belly (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004)/;

8. Changes in native species dynamics-8.2. Predators /carnivores such as Steppe Eagle, Golden Eagle, White-tailed Eagle, Grey Wolf (*Canis lupus*), Raccoon Dog (*Nyctereutes procyonoides*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless and moulting individuals/;

8.3. Prey and food base /a lack of food base associated with human activities/;

8.5. Pathogens or parasites /highly pathogenic avian influenza/;

10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/;

10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

41. Scientific Name: *Aythya marila*

Species Authority: (Linnaeus, 1761)

Common Names: Greater Scaup or Scaup (English), Tengisiin shumbuur (Mongolian)

Subspecies in Mongolia: *A. m. marila* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Baker (1993); Howard & Moore (1994) for further details).

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Costa Rica, Cuba, Jamaica, Bahamas, Turks and Caicos Islands, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Svalbard and Jan Mayen, Tunisia, It is regionally extinct in Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Turkey, Russian Federation, Cyprus, Israel, Iraq, Islamic Republic of Iran, Kazakhstan, This species is considered vagrant in Afghanistan, Pakistan, India, China, Nepal, Mongolia, Bangladesh, Myanmar, Viet Nam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands.

Regional Distribution: Two individuals were found at Orog Lake of Bayankhongor province (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold & Tseveenmyadag, 2002; Bold, 2005) and a single bird was seen in Döröö Lake of Dornod province in 2008 (N. Tseveenmyadag pers. comm.). Piechocki (1968) observed a single bird at Uvs Lake of Uvs province in June (Archimaeve-Ozerskaya & Zabelin, 2010). Several pairs were seen during a cold spell at Ögii Lake of Övörkhangai province on 7 June 1964 (Piechocki, 1968). A single bird and a pair of the species were also photographed in Ögii Lake of Övörkhangai province in July of 2005 (Ch. Uuganbayar pers. comm.)

Population: The global population consists of 1,200,000 - 1,400,000 mature individuals. Global breeding and resident ranges are estimated at 7,830,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Migrants fly across fresh-water, brackish and saline lakes and ponds together with other ducks in the Valley of the Lakes, Khangai and Eastern Mongolian Plain by late April-early May (spring migration) and late August-early September (autumn migration), depending on food availability and weather conditions. On migration, individuals and pairs occur often together with other ducks (Velvet Scoter, Long-tailed Duck). They feed on leaves, roots, seeds of aquatic plants and water invertebrate, such as small crustacean, insects, larvae, and small fishes.

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.1., 5.4.- 5.9., 5.13.- 5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /most abundant avian predators such as Saker Falcon and White-tailed Eagle prey on this species/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Particular conservation measures have not been taken to the species. However, migrants pass through the protected area, such as Mongol Daguur and Nömrög Strictly Protected Areas and Important Bird Areas, such as Buir, Ögii and Uvs Lakes in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes
Family: Anatidae

42. Scientific Name: *Histrionicus histrionicus*

Species Authority: (Linnaeus, 1758)

Common Names: Harlequin Duck (English)

Khotguujin chörh or Khotguujin nugas (Mongolian)

Subspecies in Mongolia: *H. h. pacificus* (see Madge & Burn (1988); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Greenland, Iceland, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Poland, Croatia, Slovakia, Montenegro, Ukraine, Russian Federation, Kazakhstan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: In Mongolia, a single bird was observed in Orog Lake of Bayankhongor province on 1-2 June of 1962 (Fischer 1968; Bold, 1973; Fomin & Bold, 1991; Dawaa *et al.*, 1994).

Population: The global population consists of 190,000 - 380,000 mature individuals. Global breeding and resident ranges are estimated at 7,910,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Single migrant was recorded in Orog Lake that dried out five years ago. Migrating individuals can occur in other lakes of the Valley of the Lakes and Great Lakes Depression migration. It feeds on aquatic insects and their larvae, molluscs and small crustaceans (MacKinnon&Phillips, 2000).

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.1., 5.4.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation - 1.1.4. Livestock-1.1.4.1. Nomadic; 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism-1.4.6. Dams; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement; 7. Natural disasters-7.1. Drought; 8. Changes in native species dynamics-8.2. Predators-8.5. Pathogens or parasites; 10. Human disturbance-10.4. Transport-10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, migrants pass through the protected area, such as Khar-Us Lake and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

43. Scientific Name: *Melanitta fusca*

Species Authority: (Linnaeus, 1758)

Common Names: White-winged Scoter or Velvet Scoter (English), Tolit monkhdoi or dört nugas (Mongolian)

Subspecies in Mongolia: *M. d. (fusca) stejnegeri* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Israel, Lebanon, Georgia, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, China, Mongolia, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at upper Khovd River, Khoton and Khorgon Lakes (Mongol-Altai Mountain Range); Hövsgöl Lake (Hövsgöl Mountain Range); Selenge River (Altaat and Bort Rivers) (Orkhon-Selenge River basins). It migrates through the breeding areas and lakes and large rivers in the Mongol-Altai Mountain Range, Northern Uvs Depression, Tes River valley, Great Lakes Depression, Khangai Mountain Range, South Khangai Plateau, Tarvagatai-Bulnai Mountains, Darkhad Depression, Hentii Mountain Range, Middle Khalkh Steppe, Mongol Daguur Steppe and Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, and Valley of the Lakes (Dorogostaiskii, 1908; Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Samiya, 1978; Tungalag, 1983; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 1,700,000 - 3,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a breeding visitor. Breeding, summering and migrating individuals arrive in the country by mid-April-early May. Breeding begins by mid-May-early June. It nests on the ground in bushy, wooded, and overgrown sites on islands close to fresh water rivers and lakes (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a hollow lined with nearby plant material, leaves or twigs, and with down and feathers. Down tufts larger than those of Common Scoter, dark brown with indistinct pale centres. Clutch size of breeding pairs varies from 6 to 11. Egg colour is non-glossy pale-creamy to buff. Female incubates the eggs for 27-28 days. Number of chicks also varies 6-11. Fledglings are able to fly in approximately 6-7 weeks. The young remain together parents and forage in water. They are often seen in water. Both parents and young feed predominantly on molluscs, as well as crustaceans, worms, echinoderms, amphipods, isopods, small fish, and (in freshwater habitats) adult and larval insects. The species may also consume plant material on its breeding grounds (e.g. leaves and shoots) in water (del Hoyo *et al.*, 1992). Non-breeding or summering birds occur in freshwater lakes in forest, forest steppe and mountain steppe. On migration, they form flocks consisting of 8-30 birds and forage in fresh water and brackish lakes, slow running rivers and pools from forest steppe to steppe. They leave the country for wintering grounds by late August-early October, depending on food availability and weather conditions.

Habitat Type: 1. Forest (near 1.4. only on migration); 5. Wetlands (inland) (5.1.- 5.9., 5.13.- 5.17.).

Dominant threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* of Zost Lake/, 1.7. Fires / forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought / see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as White-tailed Eagle and Grey Wolf (*Canis lupus*) in the region easily prey upon the flightless and moulting individuals/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites / highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

44. Scientific Name: *Clangula hyemalis*

Species Authority: (Linnaeus, 1758)

Common Names: Long-tailed Duck (English), Möngölög shungaakhai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Ireland, Portugal, Spain, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Turkey, Russian Federation, Israel, Jordan, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Pakistan, India, China, Nepal, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: A. Bold, J. Ställberg, M. Gerdin, and M. Grundsten observed a male in summer plumage in Orog Lake on 8 June 2003 (Bold *et al.*, 2005). J.Brookhouse, S. Bussuttil, and B. Batdorj recorded a pair of the species in the Tashgain Tavan Lake of Dornod province on 10 May 2004. M. Thomas, J. Badley, Ch. Uuganbayar, and P. Amartuvshin saw a female in the Delger Tsagaan Lake of Dashbalbar sum in Dornod province (Badley, 2005; Tseveenmyadag & Bold, 2006). A single bird was recorded in Sangiin Dalai Lake of Övörkhangai province in August, 2007 (S. Gombobaatar pers. comm. and photographs).

Population: The global population consists of 6,200,000 - 6,800,000 mature individuals. Global breeding and resident ranges are estimated at 10,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Very few individuals were observed in eastern, central and southern Mongolia during the spring (late April-early May) and autumn migration (late August-early September). They occur singly or in pairs in fresh-water, brackish and saline lakes in Mongolia. Feeding ecology and migration behaviour is almost unknown in Mongolia. According to MacKinnon&Phillipps (2000), it feeds on insect larvae, small crustaceans, molluscs, and fish.

Habitat Type: 5. Wetlands (inland) (5.1., 5.4.- 5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global

warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /most abundant avian predators such as Saker Falcons prey on this species/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Particular conservation measures have not been taken to the species. However, migrants pass through the protected area, such as Khar-Us Lake and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

45. Scientific Name: *Bucephala clangula*

Species Authority: (Linnaeus, 1758)

Common Names: Common Goldeneye or Goldeneye (English), Alag shungaach (Mongolian)

Subspecies in Mongolia: *B. c. clangula* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Bahamas, Saint Pierre, Miquelon, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Russian Federation, Cyprus, Israel, Jordan, Lebanon, Syrian Arab Republic, Iraq, Islamic Republic of Iran, Kazakhstan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Myanmar, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at the delta of Tes Torkholig Rivers and Uvs Lake (Northern Uvs Depression); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Onon, Balj Rivers (Hentii Mountain Range). It migrates through the breeding areas and Khovd River and Achit, Uureg Lakes (Mongol-Altai Mountain Range); Uvs, Khar-Us, Khar, Dörgön Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan River (Desert steppe depression in Zavkhan); Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Telmen Lakes (Tarvagatai-Bulnai Mountains); Orkhon, Selenge Rivers (Orkhon-Selenge River basins); Herlen River valley (Middle Khalkh Steppe); Ulz, Döch Rivers and Yakhi, Bayan-Erhet, Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, and Delger Tsagaan Lakes (Mongol Daguur Steppe); Eastern Mongolia plain; Khalkh, Degee, Nömrög, Azarga Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar, Tashgain Tavan and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog and Taatsyn Tsagaan Lakes (Valley

of the Lakes); Bulgan River valley (Dzungariin Gobi) (Kozlova, 1930; Bold, 1969; Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Ganbat, 1978; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Bold & Batsaikhan, 2006; Boldbaatar, 2006; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 2,500,000 - 4,600,000 mature individuals. Global breeding and resident ranges are estimated at 22,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding, summering and migrating birds arrive in Mongolia by mid-April-early May. Breeding begins in late April-early May. They breed by lakes and rivers in forest country. The nest is placed in natural cavities in trees or stumps, or in Black Woodpecker holes (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest has no material other than that present, down and some feathers added. Down tufts greyish-white. Female lays 6-11 bluish green eggs. The female incubates the eggs alone for 27-32 days. Young jump safely from their tree cavities and tree holes to the ground. The female broods the young and leads them to water after hatching. The young fly at 50-60 days. Both adults and young feed almost exclusively on small aquatic invertebrates such as molluscs, small crustaceans, insect larvae and fishes and plant matter. Summering and moulting birds gather in large freshwater lakes. On migration, it forms large flocks consisting of up to 1,000 individuals and forages in the breeding habitats, large fresh-water, brackish and saline lakes, river deltas, large pools and ponds, channels, and wheat fields and oases for foraging and resting from taiga forest to Gobi Desert, and lake shores, river banks, islands, and sand bars for resting and roosting. They leave their breeding and summering ground by late August-early October, depending on weather conditions. Few individuals winter in Khovd, Tatkhan Teel, Chono Kharaikh and Zavkhan Rivers; and Uvs, Khar and Khar-Us Lakes, Nagoon Khooloi and Yamyn Khooloi (Great Lakes Depression) and rivers in Hövsgöl Lake areas (Berezovskii, 1881; Tugarinov, 1929; Kozlova, 1930; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Nyambayar, 2003; Gombobaatar, 2004).

Habitat Type: 1. Forest (near 1.4. only on migration); 5. Wetlands (inland) (5.1.- 5.9., 5.13.- 5.17.); 12. Artificial – Aquatic (12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /in winter, livestock of local families drink fresh water in the unfrozen open water where they roost and feed at midday. Drinking water of local families, their livestock and wintering site of the species overlap along some lakes and rivers in winter and spring, summer and autumn. According to our field survey, birds move to unfrozen open water sites in close proximity to lake and river valleys while cattle come to the site in the morning in winter. It is not likely to be a dangerous threat for wintering ducks in Mongolia. But, detailed field survey of the subject is required (Gombobaatar, 2004). Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp. of Zost Lake/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.1. Food -3.1.1 Subsistence use or local trade /people occasionally shoot this species for its meat/, 3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and

spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1. / -7.3. Temperature extremes /freezing of open water where wintering Goldeneyes are at high density is a serious factor in lakes and rivers during cold winters. A cause of mortality for wintering ducks was getting the feet or belly stuck in quickly-forming ice (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004)/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Saker Falcon, Golden Eagle, White-tailed Eagle, Sable (*Martes zibellina*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon eggs and flightless and moulting individuals/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza. This species was infected by highly pathogenic avian influenza viruses (H5N1) at Erhil Lake of Hövsgöl province on 6 May, 2006 and at Duruu Lake of Arkhangai province on 5 August, 2009 (Batchuluun & Damdindorj, 2011)/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

46. Scientific Name: *Mergus albellus*

Species Authority: (Linnaeus, 1758)

Common Names: Smew (English), Tsakhiur bokhio or tsakhiur nugas (Mongolian)

Synonyms: *Mergus albellus* Cramp & Simmons (1977-1994), *Mergus albellus* AERC TAC (2003).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Iceland, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Iraq, Islamic Republic of Iran, Kazakhstan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Myanmar, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: The species migrates along Uvs Lake, delta of Tes and Torkholig Rivers (Northern Uvs Depression); Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan River (Desert steppe depression in Zavkhan); upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Telmen Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake (Darkhad Depression); Lower Orkhon, Selenge, Kharaa, Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Onon,

Balj Rivers (Hentii Mountain Range); Herlen and Ulz Rivers (Herlen-Ulz River basins); Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008). Birds were seen at Dayan Lake, Khovd province and Ganga Lake of Suhbaatar province (N.Tseveenmyadag pers. comm.). Very few birds irregularly winter in Khomyn Khoooloi (Great Lakes Depression) (Nyambayar, 2003).

Population: The global population consists of 130,000 mature individuals. Global breeding and resident ranges are estimated at 12,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a summer visitor and passage migrant. They summer and pass across large fresh water and brackish lakes and other wetlands by late April-early May (spring migration) and late August-early October (autumn migration). Individuals occur, or in small flocks of 3-12 individuals in fresh water and brackish lakes, large slow running rivers, and large ponds with reeds in forest, forest steppe and mountain steppe on migration. The feed on benthic aquatic invertebrates such as adult and larval insects, crustaceans, molluscs and polychaete worms, as well as amphibians, small fish and plant matter (seeds, leaves and roots). During the winter and In early spring, however, the species mainly feeds on fish (del Hoyo *et al.*, 1992). A few birds irregularly winter in Khomyn Khoooloi of Khovd province (Great Lakes Depression) (Nyambayar, 2003; Gombobaatar, 2004).

Habitat Type: 1. Forest (near 1.4. only on migration); 5. Wetlands (inland) (5.1.- 5.9., 5.13.- 5.17.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /in winter, livestock of local families drink fresh water in the unfrozen open water where they roost and feed at midday. Drinking water of local families, their livestock and wintering site of the species overlap along some lakes and rivers in winter and spring, summer and autumn. According to our field survey, birds move to unfrozen open water sites in close proximity to lake and river valleys while cattle come to the site in the morning in winter. It is not likely to be a dangerous threat for wintering ducks in Mongolia. But detailed field survey of the subject is required (Gombobaatar, 2004). In summer, overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* of Zost Lake, causing fish mortality /; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii, Khar and Hövsgöl Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./, 7.3. Temperature extremes /freezing of open water where wintering individuals are at high density, is a serious factor in lakes and rivers during cold winters. A cause of mortality for wintering ducks was getting the feet or belly stuck in quickly-forming ice (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004)/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Saker Falcon, White-tailed Eagle in the region prey upon some individuals/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport/ transport by boat and car near tourist camps and busy roads have been negatively affecting this species/.

Conservation Measures: Approximately 8.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

47. Scientific Name: *Mergus serrator*

Species Authority: Linnaeus, 1758

Common Names: Red-breasted Merganser (English), Sevger bokhio or sevger nugas (Mongolian)

Subspecies in Mongolia: *M. s. serrator* (see Madge & Burn (1988) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Belize, Cuba, Cayman Islands, Haiti, Bahamas, Turks and Caicos Islands, Puerto Rico, Virgin Islands, U.S. Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Cyprus, Israel, Jordan, Lebanon, Syrian Arab Republic, Iraq, Armenia, Islamic Republic of Iran, Kazakhstan, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, India, China, Nepal, Mongolia, Taiwan, Japan, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species has been recorded at the upper Selenge River valley, Terhiin Tsagaan Lake of Bayankhongor province, Ögii Lake of Övörkhangai province and its surrounding areas (Khangai and Hentii Mountain Ranges) on migration (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 510,000 - 610,000 mature individuals. Global breeding and resident ranges are estimated at 23,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this species is a passage migrant. Migrating individuals pass through the above-mentioned areas by late April-early May (spring migration) and late August-early September (autumn migration). They occur singly, or in a pair in large freshwater lakes and slow running rivers with abundant fish in forest, forest steppe and mountains steppe. Migration behaviour is poorly known in Mongolia. They feed predominantly on small freshwater fish, as well as small amounts of plant material and aquatic invertebrates such as crustaceans (e.g. shrimps), worms and insects (del Hoyo *et al.*, 1992).

Habitat Type: 1. Forest (1.4. only on migration); 5. Wetlands (inland) (5.1.- 5.9., 5.13.- 5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement; 6. Pollution -6.3. Water pollution; 7. Natural disasters -7.1. Drought; 10. Human disturbance-10.4. Transport.

Conservation Measures: Approximately 7.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

48. Scientific Name: *Mergus merganser*

Species Authority: Linnaeus, 1758

Common Names: Common Merganser or Goosander (English), Khumkhin bokhio or khumkhin nugas (Mongolian)

Subspecies in Mongolia: *M. m. merganser* (see Madge & Burn (1988); del Hoyo *et al.* (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, commercial and industrial water pollution, drought, mining and fishery activities, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Russian Federation, Cyprus, Israel, Lebanon, Iraq, Islamic Republic of Iran, Kazakhstan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan, This species is regionally extinct in Bosnia and Herze Gobina.

Regional Distribution: This species breeds at Khovd River and Khoton, Khorgon, Tolbo, Dayan, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Ider and Chuluut Rivers and Terhiin Tsagaan, Sangiin Dalai, Telmen Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lakes wetlands (Darkhad Depression); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai Rivers (Hentii Mountain Range); lakes in Herlen-Ulz River basins; Khalkh, Nömrög Rivers, and Buir Lake (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas and rivers and lakes in Great Lakes Depression, Valley of the Lakes, Dzungariin and Sharga Gobi (Kozlova, 1930; Bold, 1969; Bold, 1973; Skryabin & Sumiya, 1976; Ganbat, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Boldbaatar 2006; Boldbaatar, 2008; Nyambayar & Tsevenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). It winters in open waters in Uvs Lake Depression, Yamyn Khooloi, Khomyn Khooloi, Khovd, Chono Kharaikh (Great Lakes Depression), Orkhon, Selenge and Tuul and Terelj Rivers (near Ulaanbaatar) (Orkhon-Selenge River Basins) (Molleson, 1896; Tugarinov, 1929; Bold, 1973; Zabelin, 1996; Nyambayar, 2003; Gombobaatar, 2004).

Population: The global population consists of 1,700,000 - 2,400,000 mature individuals. Global breeding and resident ranges are estimated at 21,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a breeding visitor and wintering birds have also been found. They arrive in the breeding sites by mid-April-early May. Breeding season continues from May-July. They nest in cavities in trees, on the ground underneath dead trees, in holes and cavities on river banks and cliffs near fresh water rivers and lakes with abundant fish (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs lay 2-15 eggs of glossy, creamy-white to yellowish colour. Incubation is by female alone for 28-32 days. Young remain together with the female. They feed predominantly on fish less than 10 cm long, but may also include aquatic invertebrates (such as molluscs, crustaceans, worms, and adult and larval insects), amphibians, birds and small mammals (del Hoyo *et al.*, 1992). Family groups are often seen in large fast running mountain rivers and large freshwater lakes in taiga forest to forest steppe. They rest and roost on islands, river banks and islets in rivers and large freshwater lakes. Migrating birds occur in pairs or small flocks of 4-25 individuals in the breeding sites, freshwater lakes and rivers, pools and ponds, saline and brackish lakes from taiga forest to Gobi Desert. They leave the breeding site for wintering grounds by late August-early October, depending on food availability and weather conditions. They winter in open waters in Uvs Lake Depression, Yamyn Khooloi, Khomyn Khooloi, Khovd, Chono Kharaiikh (Great Lakes Depression), Orkhon, Selenge and Tuul and Terelj Rivers, near Ulaanbaatar (Orkhon-Selenge River basins and Hentii Mountain Range) (Molleson, 1896; Tugarinov, 1929; Bold, 1973; Zabelin, 1996; Nyambayar, 2003; Gombobaatar, 2004). Habitat Type: 1. Forest (1.4.); 5. Wetlands (inland) (5.1.- 5.9., 5.13.- 5.17.); 12. Artificial – Aquatic (12.2., 12.6., 12.9.).

Dominant threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /in winter, livestock of local families drink fresh water in the unfrozen open water where they roost and feed at midday. Drinking water of local families, their livestock and wintering site of the species overlap along some lakes and rivers in winter and spring, summer and autumn. According to our field survey, birds move to unfrozen open water sites in close proximity to lake and river valleys while cattle come to the site in the morning in winter. It is not likely to be a dangerous threat for wintering ducks in Mongolia. But detailed field survey of the subject is required (Gombobaatar, 2004). Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* of Zost Lake, causing fish mortality/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii, Khar and Hövsgöl Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./, 7.3. Temperature extremes /freezing of open water where wintering individuals are at high density can be a serious factor in lakes and rivers during cold winters, when a cause of mortality for wintering ducks is feet or belly becoming stuck (Berezovskii, 1881; Munkhtogtokh & Batbold, 1995; Bold *et al.*, 1998; Gombobaatar, 2004)/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as

White-tailed Eagles prey upon individuals/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 10.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Anseriformes

Family: Anatidae

49. Scientific Name: *Oxyura leucocephala*

Species Authority: (Scopoli, 1769)

Common Names: White-headed Duck (English), Tsagaanmolgoit yamaansuult or yamaansuult (Mongolian)

Global Status: Endangered, A2bcde

Regional Status: Endangered, B1; C2a(i)

Rationale for Assessment: This species has been assessed as Endangered B1; C2a(i) because the extent of occurrence is less than 5,000 km². The number of mature individuals is less than 2,500 and the number of mature individuals in the largest subpopulation is less than 250. Further research is needed into habitat, threats, ecology, migratory routes and establishing more protected areas for this species.

History: 2009-Endangered

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Morocco, Portugal, Spain, Algeria, France, Belgium, Netherlands, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Slovenia, Poland, Malta, it has uncertain presence and origin in Croatia, Bosnia and Herzegovina, It is regionally extinct in Hungary, Slovakia, Montenegro, Serbia, It is considered vagrant in Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Ukraine, Bulgaria, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Mongolia.

Regional Distribution: This species breeds at the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Khar-Us (one pair in June, 1995 and south-western part of Khar-Us Lake, five adults and two juveniles in July and August, 1992), Khar, Dörgön Lakes and the delta of Khovd River with reed beds (Great Lakes Depression). It migrates through Tes, Torkholig Rivers (15-18 birds seen in summer of 1981 and 40 birds in 1985) (Northern Uvs Depression); Airag and Khyargas Lakes (eight birds undated), Khar-Us (9 males and 13 females in May, 1995; 28 males and one female in June, 1995; 9 males and 3 females in June 1996; 238 birds (including c.60 males) in September, 1998), Khar, Dörgön Lakes and the delta of Khovd River with reed beds (Great Lakes Depression), Zereg Lake of Zereg sum, Khovd province (a female in May, 1995), and Zavkhan River valley (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bräunlich 1995; Bold 1997; Liegl 1998; BirdLife International, 2001; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010) and Khargal Lake of Bulgan province (N.Tseveenmyadag pers. comm.). M. Gilbert (Wildlife Conservation Society) counted a total of 51 individuals at Uvs Lake of Uvs province on 14 September, 2006 and 138 birds at Khar-Us Lake (Great Lakes Depression) on 22 September, 2006 (Bräunlich, 2006a). Three females and a male were seen in Tsegeen Lake of Lun sum in Töv province on 28 May, 2010 (P.Amartuvshin pers. comm. and photographs).

Population: The global population consists of 7,900 - 13,100 mature individuals. Global breeding and resident ranges are estimated at 680,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. A total of 500-1,000 individuals were recorded in Khyargas, Uvs, and Airag Lakes (MNE & JICA, 2001).

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this species is a breeding visitor. Breeding and migrating individuals arrive in summering and breeding sites by mid-April-early May. Breeding begins in late April-mid-May. Breeding ecology of the species is poorly known in Mongolia. They nest on the ground in reeds and tall sedge grass where birds can hide in fresh water, or deep brackish lakes. The nest is a partly floating structure built among growing reeds. The nest is made of stalks and leaves situated in sedge thickets, on floating reed mats at water's edge or directly on water, anchored between reed stalks. The nest is sometimes lined with white down. Breeding pairs lay 5-15 eggs of dull white. Incubation is for 25-27 days. The number of chicks depends on food and weather conditions however they rear 15 chicks maximum. Both adults and young feed on seeds and leaves of aquatic plants, also insects and their larvae in water. On migration, they occur in pairs or small flocks of 4-250 individuals in fresh water and brackish lakes, ponds and pools with reeds and sedges. Breeding and migrating birds leave their summering and breeding site for wintering grounds by late August-mid-September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (near 1.4. only on migration); 5. Wetlands (inland) (5.1.- 5.9., 5.13.- 5.17.).

Dominant threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which are contaminated by heavy metals like mercury.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important habitats for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting, roosting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain. Reduction of water levels, reed-cutting, fire and hunting are threats to their breeding grounds (Batdelger, 1998).

8. Changes in native species dynamics-8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: Steppe fires burn reeds and sedge grass in their breeding habitats near lakes and rivers. Fires may burn nests with eggs.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Included in CITES Appendix II. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 20.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gaviiformes

Family: Gaviidae

50. Scientific Name: *Gavia stellata*

Species Authority: (Pontoppidan, 1763)

Common Names: Red-throated Loon or Red-throated Diver (English), Ulaanguyeet gakhun or ulaanomruut akhuuna (Mongolian)

Subspecies in Mongolia: *G. s. stellata* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is limited. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA & MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Greenland, Iceland, Gambia, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherland, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Hungary, Slovakia, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Lithuania, Ukraine, Bulgaria, Belarus, Bosnia, Montenegro, Latvia, Estonia, Republic of Moldova, Russian Federation, Pakistan, India, China, Mongolia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: It has been recorded in Buur River of Selenge province on the Russian border. It migrates through north and central Mongolia (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 200,000-590,000 mature individuals. Global breeding and resident range are estimated at 22,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: This species is considered a rare passage migrant in Mongolia, inhabiting large freshwater lakes with fishes. The main diet of the species is fish and aquatic invertebrates. On migration, they are also found in saline lakes and ponds. They pass through the country by late April-early May (on spring migration) and late August-early September (on autumn migration) depending on weather conditions and food availability.

Habitat Type: 5. Wetlands (inland) (5.1., 5.5., 5.9., 5.13., 5.14., 5.15., 5.16).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii, Khar and Hövsgöl Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/; 6. Pollution (affecting habitat and species)-6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /ponds, islands of saline and freshwater lakes with reed beds drying out/; 8. Changes in native species dynamics-8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy car road/, 10.5. Fire /see 1.7/.

Conservation Measures: This species is included in Appendix II of the Convention Migratory Species (CMS) in 2002. Approximately 1.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gaviiformes

Family: Gaviidae

51. Scientific Name: *Gavia arctica*

Species Authority: (Linnaeus, 1758)

Common Names: Arctic Loon, Black-throated Loon or Black-throated Diver (English), Hilenguyeeet gakhуun or hilenomruut akhuuna (Mongolian)

Subspecies in Mongolia: *G. a. viridigularis* (see Baker (1993) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: United States, Mexico, Saint Pierre and Miquelon, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Croatia, Poland, Bosnia, Hungary, Slovakia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Republic of Moldova, Russian Federation, Israel, Jordan, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, India, Mongolia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Tolbo, Khoton, Dayan, and Achit Lakes (Mongol-Altai Mountain Range), Northern Uvs Depression and Khar, Khar-Uс, Khyargas Lakes (Great Lakes Depression); Bööntsagaan Lake (Valley of the Lakes); Hövsgöl Lake and Darkhad Depression; Terhiin Tsagaan and Teel Lakes (N Khangai Mountain). It migrates through lake valleys and wetlands in Mongol-Altai Mountain Range; Uvs Lakes and Tes River (Northern Uvs Depression); Khar-Uс, Khar, Dörgön, Khyargas (Great Lakes Depression); Telmen, Sangiin Dalai, Terhiin Tsagaan, Ögii Lakes, and Terkh, Zuil, Shar-Uс, Urt, Tsagaan, Suman, Galuut, Hungui Rivers (Khangai Mountain Range); Hövsgöl Lake, Erhel, Targan, Khorkhoit, Burgast and Sant Lakes and Shishgid, Eg, Alagtsar, Delgermörön, Sharga and Ider Rivers (Hövsgöl Mountain Range); Tuul, Kharaa, Selenge, Orkhon, Onon, Balj Rivers (Hentii Mountain Range); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes) (Sushkin 1925, Kozlova, 1930, 1932, 1933 & 1938; Sushkin, 1938; Pavlov, 1948; Eregdendagva, 1960; Bold, 1962; Bold, 1969; Bold, 1970 & 1973; Skryabin & Sumiya, 1976; Ganbat, 1978; Tungalag, 1983; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Bold *et al.*, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Tsevenmyadag & Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin 2010).

Population: The global population consists of 280,000-1,500,000 mature individuals. Global breeding and resident ranges are estimated at 18,900,000 km² (BirdLife International, 2011). No population data for the country is available.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor. It arrives in breeding areas by late April–early May. Breeding begins in mid-May–early June. It breeds on large, deep lakes in bare wooded country, and occasionally on small bodies of water. Breeding pairs usually nest on a small island, sometimes on shore, very close to water with abundant fishes and aquatic vertebrates (Skryabin & Sumiya 1976, Sumiya & Skryabin 1989, Bold *et al.*, 2005, Tsevenmyadag *et al.*, 2010, Gombobaatar 2011). The nest is a shallow scrape on a raised site, with varying amounts of vegetation and at times a large heap. The female normally lays 2, sometimes 3 eggs of slightly glossy olive-brown, sometimes greenish or dark brown colour with black spots, blotches or streaks. A nest with 3 eggs was recorded in Sangiin Dalai Lake of Övörkhangaï on 6 June, 2006 (S.Gombobaatar pers. comm.). Both adults incubate the eggs for 28–29 days. Both sexes care for and feed young on fishes and aquatic invertebrates. They fly some distance for food, bringing it back in the bill. Adults may remain with young, which may feed themselves at about 5 weeks. First flight takes place at about 2 months. Autumn migration begins by late August to mid-September. By late August, fully-grown flightless chicks were found in Hövsgöl Lake (Sumiya & Skryabin 1989). A nest with 3 eggs was recorded in Sangiin Dalai Lake of Övörkhangaï province on 6 June, 2006 (S. Gombobaatar pers. comm. and photographs).

Habitat Type: 5. Wetlands (inland) (5.1., 5.5., 5.6., 5.7., 5.8., 5.9., 5.13.–5.17); 12. Artificial – Aquatic (12.6., 12.9., 12.10.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through contamination by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/- 1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality /; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/, 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is a potential threat on migration/; 6. Pollution (affecting habitat and species)-6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /ponds, islands of saline and freshwater lakes with reed beds drying out/; 8. Changes in native species dynamics- 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Podicipediformes

Family: Podicipedidae

52. Scientific Name: *Podiceps ruficollis*

Species Authority: (Pallas, 1764)

Common Names: Little Grebe (English), Khurgan shunguur (Mongolian)

Subspecies in Mongolia: *P. r. ruficollis* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Tachybaptus ruficollis* (Pallas, 1764)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by flooding, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Senegal, Mauritania, Gambia, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Monaco, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, Sweden, Angola, Namibia, Czech Republic, the Democratic Republic of the Congo, San Marino, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea. This species is possibly extinct regionally in Western Sahara.

Regional Distribution: This species may breed in the Khar-Us Lake of the Great Lakes Depression. Migrating birds occur in Darkhad Depression and its wetlands, Hövsgöl Lake; Khar-Us, Khar, Dörgön, and Khyargas Lakes (Great Lakes Depression) and Bööntsagaan Lake (Valley of the Lakes) (Terbish & Gombobaatar 2003, Bold 2005, Boldbaatar 2005a, Tseveenmyadag *et al.*, 2005, Boldbaatar 2008, Gombobaatar *et al.*, 2008, Sh.Boldbaatar pers. comm., 2009). Birds were also found in wetlands of Hentii Mountain Range during the breeding season (Tseveenmyadag *et al.*, 2005, N. Tseveenmyadag pers. comm.).

Population: The global population consists of 610,000 - 3,500,000 mature individuals. Global breeding and resident ranges are estimated at 36,700,000 km² (BirdLife International, 2011). No population data for Mongolia is available.

Regional Population Trend: Stable.

Habitats & Ecology: It is a rare summer visitor and might be a breeding visitor. It arrives at breeding sites by late April–early May (on spring migration) and leaves the sites by late August—mid-September (on autumn migration). In Mongolia, this species possibly nests on lakes and pools with open water and dense vegetation (Bold *et al.*, 2005; Gombobaatar, 2012). Breeding ecology is poorly known in the country. During the breeding season it inhabits ponds, pools, small freshwater lakes with reed beds and sedge grasses. According to Harrison (1975), it breeds on fresh water, lakes, ponds and large or small rivers. The nest is usually under vegetation cover, often near the water's edge. The nest is a heap of vegetation built up above water level, in shallow water. The female usually lays 4-6 eggs of white colour. Both sexes incubate the eggs for 19-25 days. Both adults feed young on fishes and aquatic invertebrates. The young live independently at 42 days, flying at 44-48 days. Migrating birds occur in large saline and freshwater lakes, pools and ponds with reeds, large rivers with abundant fishes. It feeds on aquatic invertebrates and small fishes.

Habitat Type: 5. Wetlands (inland) (5.1., 5.5.- 5.9., 5.13.-5.17); 12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through contamination by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality /; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)-6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /ponds, islands of saline and freshwater lakes with reed beds drying out/; 8. Changes in native species dynamics- 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 45.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Podicipediformes

Family: Podicipedidae

53. Scientific Name: *Podiceps grisegena*

Species Authority: (Boddaert, 1783)

Common Names: Red-necked Grebe (English), Buural shunguur (Mongolian)

Subspecies in Mongolia: *P. g. holboelli* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by flooding, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Bahamas, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Croatia, Hungary, Bosnia and Herzegovina, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Lebanon, Syrian Arab Republic, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Afghanistan, Republic of, Pakistan, India, Kyrgyzstan, China, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: The species migrates along Khalkh, Degee, Nömrög, Tsagaan Chuluut, Mogoit,

Azarga and Galdastai Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar, Tashgain Tavan and Khonkhor Lakes (Khalkh Gol and Khyangan region); Herlen, Ulz, Döch, Khariin Rivers and Yakhi, Bayan-Erhet, Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, and Delger Tsagaan Lakes (Eastern Steppe and Herlen, Ulz basins); Ögii Lake (Khangai Mountain) (Kozlova, 1930; Tungalag, 1983; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2003; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005). It may nest at Buir Lake, Dornod province.

Population: The global population consists of 190,000 - 290,000 mature individuals. Global breeding and resident ranges are estimated at 18,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable

Habitats & Ecology: In Mongolia, it is a summer visitor. The species arrives in summering sites by late April-early May, depending on weather conditions. They breed on freshwater lakes, lagoons, floodwaters, calm rivers; with some vegetation cover. According to Harrison (1975), the nest is a low mound of rotting aquatic and waterside vegetation, floating or built up in shallows with small hollow on top. The female normally lays 4-5 eggs with long elliptical to sub-elliptical shapes with biconical tendency and white colour. Both parents incubate the eggs for 22-25 days. The young and parents appear to remain together for a long period. They leave Mongolia by late August-early September, depending on food availability and weather conditions. Migrating birds occur singly, or in pairs in open lakes and pools in eastern Mongolia.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.5.- 5.8., 5.14.- 5.17); 10. 12. Artificial – Aquatic (12.2., 12.6., 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through water contaminated by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species /; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought / see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 10.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Podicipediformes

Family: Podicipedidae

54. Scientific Name: *Podiceps cristatus*

Species Authority: (Linnaeus, 1758)

Common Names: Great Crested Grebe (English), Otgot shunguur (Mongolian)

Subspecies in Mongolia: *P. c. cristatus* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by flooding, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Iceland, Senegal, Gambia, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Monaco, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, Sweden, Angola, Namibia, Czech Republic, San Marino, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Australia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan, New Zealand.

Regional Distribution: This species breeds and migrates through Khalkh, Degee, Nömrög, Tsagaan Chuluut, Mogoit, Azarga, Galdastai Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar Lakes, Tashgain Tavan Lake, Khonkhor Lakes (Khalkh River and Khyangan region); Herlen, Ulz, Döch, Khariin Rivers and Yakhi, Bayan-Erhet, Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, and Delger Tsagaan Lakes (Eastern Steppe and Herlen, Ulz basins); Tuul, Terelj, Kharaa, Yeröö, Huder, Bulnai, Selenge, Orkhon, Eg, Khanui, Ider, Onon, Balj, Khurkh, Barkh, Eg, and Ulz Rivers (Hentii Mountain Range); Hövsgöl Lake, Erhel, Targan, Khorkhoit, Burgast and Sant Lakes and Shishgid, Eg, Alagtsar, Delgermörön, Sharga and Ider Rivers (Hövsgöl); Höh, Telmen, Sangiin Dalai, Terhiin Tsagaan, and Ögii Lakes and Terkh, Zuil, Shar-Us, Urt, Tsagaan, Suman, Galuut, and Hungui Rivers (Khangai Mountain); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes and Tsagaan, Urt Rivers (Valley of the Lakes); Khar-Us, Khar, Dörgön, Khyargas, (Great Lakes Depression); Uvs Lakes and Tes River (Uvs Lake Depression). The migration also occurs in small lakes of dry steppe and oasis in Gobi Desert (Kozlova, 1930; Bold, 1973; Skryabin & Sumiya, 1976; Ganbat, 1978; Piechocki *et al.*, 1981; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Tsegmid&Uuganbayar, 2006; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2002; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 1,400,000-2,900,000 mature individuals. Global breeding and resident ranges are estimated at 25,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May, depending on weather conditions. Breeding begins in early May-late May. Breeding habitats include freshwater lakes and larger pools, normally with cover at the water's edge. If normal breeding habitats are unavailable, large colonies may breed on bare islands or land sites. It nests in reed beds and tall vegetation of lakes and large pools near rivers (Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is an accumulation of aquatic and waterside vegetable matter, usually among growing reeds or similar plants and near

the water's edge, sometimes floating, or resting on the bottom in the shallows. The female normally lays 4, sometimes 3-6 eggs of a non-glossy white colour. Both sexes incubate the eggs for 25-29 days. Young follow adults from the nest after all have hatched, and can dive from a very early age. Probably independent at about 6 weeks, when second brood may begin; but young may remain with adults for up to 12 weeks, becoming increasingly independent. They feed on small fishes and aquatic invertebrates (crustaceans, insects) and rarely vertebrates (small frogs). By late July, downy chicks were observed in Hövsgöl Lake areas (Sumiya & Skryabin, 1989). They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.5.- 5.8., 5.14.- 5.17.); 10. 12. Artificial – Aquatic (12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through water contaminated by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities, see also 1.4.6./, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Podicipediformes

Family: Podicipedidae

55. Scientific Name: *Podiceps auritus*

Species Authority: (Linnaeus, 1758)

Common Names: Horned Grebe or Slavonian Grebe (English), Ukhaa shunguur (Mongolian)

Subspecies in Mongolia: *P. a. auritus* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by flooding, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Cyprus, Israel, Lebanon, Syrian Arab Republic, Georgia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Afghanistan, Pakistan, India, China, Mongolia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species nests in fresh water ponds and lakes (Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Bold *et al.*, 2005) of Hövsgöl, Khorkhoit, Burgast and Sant Lakes and Shishgid River (Hövsgöl); Khar-Us, Khar, Dörgön, Hyargas, Khoton, Dayan, Achit, Tolbo Lakes (Great Lakes Depression and Mongol–Altai Mountains); Uvs Lakes and Tes River (Uvs Lake Depression). This is a common breeder in the deltas of Khankh, Khoroo and Khodon Rivers, Hövsgöl Lake (Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989). It migrates to Khalkh, Degee, Nömrög, Tsagaan Chuluut, Azarga Rivers and Buir Lake basin including Tashgain Tavan Lake, Khonkhor Lakes (Khalkh Gol and Khyangan region); Herlen, Ulz Rivers and Yakhi, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, Delger Tsagaan Lakes (Eastern Steppe and Herlen, Ulz basins); Tuul, Kharaa, Yeröö, Selenge, Orkhon, Eg, Onon, and Balj River valleys (Hentii Mountain Range); Hövsgöl Lake, Khorkhoit, Burgast and Sant Lakes and Shishgid, Eg, Alagtsar, and Delgermörön Rivers (Hövsgöl); Höh, Telmen, Sangiin Dalai, Terhiin Tsagaan, Ögii Lakes, and Terkh, Zuil, Shar-Us, Urt, Tsagaan, Suman, Galuut, Hungui Rivers (Khangai Mountain); Bööntsagaan, Ulaan, Orog, Taatsyn Tsagaan Lakes and Tsagaan, Urt Rivers (Valley of the Lakes); Khar-Us, Khar, Dörgön, Hyargas, Airag, Khoton, Dayan, Tolbo Lakes and Khovd, Buyant, Bulgan, Uyench, Bodonch, and Barlag Rivers (Mongol–Altai Mountains and Great Lakes Depression); Uvs, Achit, Uureg Lakes and Tes River (Uvs Lake Depression) (Kozlova, 1930; Skryabin & Sumiya, 1976; Piechocki *et al.*, 1981; Tungalag, 1983; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Tseveenmyadag & Bold, 2005; Stenzel *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008).

Population: The global population consists of 140,000-1,100,000 mature individuals. Global breeding and resident ranges are estimated at 16,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May, depending on weather conditions. Breeding season extends from May-August. Breeding habitats are large and small lakes and ponds, floodwaters, calm rivers and stream backwaters where vegetation is present. The species is often solitary, but nests can be found situated in close proximity to one another at times. It usually nests in small bays, with tall vegetation in the water providing cover. The nest is a low mound of rotting aquatic vegetation built in shallow water, with a shallow nest hollow. The female usually lays 4, occasionally 3 eggs of white colour. Young are tended by both parents, but sometimes only a single adult is apparent with older chicks. On 19 June, a full clutch (4-5 eggs) was found in Hövsgöl Lake. First chicks were observed on 7 July and fully-grown flightless chicks were found in the area. By mid-August, field biologists observed flying chicks. The species leaves its breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.5.- 5.8., 5.14.-5.17); 12. Artificial – Aquatic (12.2., 12.6., 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining

/gold and other mining activities have directly and indirectly affected breeding success through water contaminated by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities, see also 1.4.6./, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 9.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Podicipediformes

Family: Podicipedidae

56. Scientific Name: *Podiceps nigricollis*

Species Authority: Brehm, 1831

Common Names: Black-necked Grebe (English), Khaltar shunguur (Mongolian)

Subspecies in Mongolia: *P. n. nigricollis* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by flooding, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Costa Rica, Bermuda, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Angola, Namibia, Czech, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Tanzania, Uganda, Swaziland, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Qatar,

United Arab Emirates, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Myanmar, Viet Nam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: It breeds at Khar-Us, Khar Lakes (Great Lakes Depression), Sharga, Terhiin Tsagaan, Sangiin Dalai, Ögii Lakes (Northern Khangai Mountain Range), Bööntsagaan Lake (Valley of the Lakes), Bus, Galuut, Höh, Khaichiin Tsagaan Lakes (end of the Ulz River), Tashgain Tavan Lake, Azarga River, Buir-Lake-Khalkh-Khyangan region (Fomin & Bold, 1991) and possibly in Hövsgöl Lake (Sumiya & Skryabin, 1989). It migrates through Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga, Galdastai Rivers and Buir, Baruun Shavar, Dund Shavar, Baga Shavar, Bulan Shavar, Tashgain Tavan, and Khonkhor Lakes (Khalkh Gol and Khyangan region); Herlen, Ulz, Döch, Khariin Rivers and Yakhi, Bayan-Erhet, Sumiin Tsagaan, Höh, Döröö, Galuut, Bus, Suujiin Tsagaan, Khaichiin Tsagaan, Khoriin Tsagaan, and Delger Tsagaan Lakes (Eastern Steppe and Herlen, Ulz basins); Tuul, Terelj, Kharaa, Yeröö, Huder, Bulnai, Selenge, Orkhon, Eg, Khanui, Ider, Onon, Balj, Khurkh, Barkh, Eg, and Ulz Rivers (Hentii Mountain Range); Hövsgöl Lake, Erhel, Targan, Khorkhoit, Burgast and Sant Lakes and Shishgid, Eg, Alagtsar, Delgermörön, Sharga and Ider Rivers (Hövsgöl); Höh, Telmen, Sangiin Dalai, Terhiin Tsagaan, Ögii Lakes, and Terkh, Zuil, Shar-Us, Urt, Tsagaan, Suman, Galuut, and Hungui Rivers (Khangai Mountain); Bööntsagaan, Ulaan, Orog, Taatsyn Tsagaan Lakes and Tsagaan and Urt Rivers (Valley of the Lakes); Khar-Us, Khar, Dörgön, Khyargas, Airag, Khoton, Dayan, Tolbo Lakes and Khovd, Buyant, Bulgan, Uyench, Bodonch, and Barlag Rivers (Mongol–Altai Mountains and Great Lakes Depression); Uvs, Achit, Uureg Lakes and Tes, Nariin, and Sagil Rivers (Uvs Lake Depression) (Kozlova, 1930; Bold, 1970, 1973 & 1977; Sumiya & Skryabin, 1989; Erdenebat, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 3,900,000 - 4,200,000 mature individuals. Global breeding and resident ranges are estimated at 16,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. At Sharga Lake, 432 individuals were found (Nyambayar & Tseveenmyadag, 2009).

Regional Population Trend: Stable.

Habitats & Ecology: This is a common breeding visitor to Mongolia. Most individuals arrive in the breeding sites by late April-early May, depending on weather conditions at breeding sites and wintering grounds. Breeding season extends from May-August. Breeding habitats are open fresh water ponds, pools, and small lakes with reeds beds and tall sedges, or river backwaters, with reed or vegetation cover (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Gombobaatar, 2012). They nest colonially, often in close proximity. The nest is a low mound of aquatic and waterside vegetation. The female normally lays 3-4, sometimes 5 eggs of a smooth white colour. Both parents incubate the eggs for 20-21 days. Both sexes care for and feed young on fishes and aquatic vertebrates. The young feed themselves at 2 weeks and live independently at 3 weeks. When alarmed, the young jump and cling on their parents' back and hide under their wing-tips and tertials. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat type: 5. Wetlands (inland) (5.1., 5.2., 5.5.- 5.8., 5.14.-5.17); 12. Artificial – Aquatic (12.2., 12.6., 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through water contaminated by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing fish mortality/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public

service places/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement / illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision / collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought / see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities, see also 1.4.6./, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Phoenicopteriformes **Family:** Phoenicopteridae

57. Scientific Name: *Phoenicopus roseus*

Species Authority: Pallas, 1811

Common Names: Greater Flamingo (English), Yagaan nal or nal deglii (Mongolian)

Subspecies in Mongolia: *P. r. roseus* (see Howard & Moore (1994) for further details)

Taxonomic notes: *Phoenicopus ruber* (Sibley & Monroe, 1990& 1993) has been split into *P. roseus* and *P. ruber* following Knox *et al.* (2002).

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Belize, Cuba, Cayman Islands, Ecuador, Jamaica, Columbia, Haiti, Bahamas, Brazil, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S. British Virgin Islands, Saint Kitts and Nevis, Guadeloupe, Trinidad and Tobago, Guyana, Saint Lucia, Suriname, French Guiana, Bermuda, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Portugal, Spain, Algeria, Gibraltar, France, Niger, Belgium, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Botswana, Greece, Romania, Finland, Latvia, Sudan, Zambia, Bulgaria, Egypt, Turkey, Lesotho, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Zimbabwe, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Cocos (Keeling) Islands, Cambodia, This is a regionally extinct vagrant in Antigua and Barbuda. It is regionally extinct in Turkmenistan.

Regional Distribution: A small flock of individuals was observed at the Khar-Us Lake of Khovd province in 1947 and 3 individuals at the Shishgid River of the Darkhad Depression of Hövsgöl province (MNE &

JICA, 2001; Boldbaatar, 2001).

Population: The global population consists of 550,000 - 680,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species is found on shores of large lakes in northern and western Mongolia. It inhabits salt ponds and saline and brackish lakes. The species is gregarious and commonly occurs in flocks of 100 or more outside of the breeding season. The species is a bottom feeder and forages both by day and night, feeding by filtering particles through tiny platelets in the bill. It often roosts at night in large flocks. Its diet consists of crustaceans (shrimp *Artemia salina*), molluscs, annelid worms, larval aquatic insects, small fish, adult terrestrial insects (e.g. water beetles, ants), seeds, algae, and diatoms (del Hoyo *et al.*, 1992).

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.1., 5.5., 5.7., 5.14.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced) -1.4.3. Tourism and recreation; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting; 6. Pollution-6.3. Water pollution- 6.3.2 Domestic; 10. Human disturbance-10.1. Recreation and tourism.

Conservation Measures: Listed in CITES Appendix II. Specific conservation measures have not been implemented for this species in Mongolia. It probably migrates through protected areas and Important Bird Areas in the west.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ciconiidae

58. Scientific Name: *Ciconia nigra*

Species Authority: (Linnaeus, 1758)

Common Names: Black Stork (English), Khar örövtas (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Cyprus, Senegal, Mauritania, Guinea-Bissau, Guinea, Morocco, Portugal, Spain, Algeria, Cote d'Ivoire, Gibraltar, France, Togo, Belgium, Nigeria, Netherlands, Luxembourg, Germany, Switzerland, Italy, China, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Tanzania, Uganda, Mozambique, Swaziland, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan. This species is considered vagrant

in Gambia; Mali; Ireland; United Kingdom; Burkina Faso; Ghana; Benin; Niger; Norway; Cameroon; Liechtenstein; The Democratic Republic of the Congo; Chad; Finland; Rwanda; Somalia; Kuwait; Oman; United Arab Emirates.

Regional Distribution: This species breeds at Buyant, Bulgan, Khovd Rivers and Khoton, Dund Lake, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Ulaan Uul, Khar Yamaat mountains in the region of Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers (Desert-steppe Depression of Zavkhan); Ih Bogd (Gobi-Altai); Tamir and Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Telmen, Khar Lakes valleys (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid River and Dood Lake (Darkhad Depression); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge basins); Tuul, Onon, Balj, and Herlen Rivers (Hentii Mountain Range); Ulz, Döch Rivers (Herlen-Ulz valleys); Khalkh, Degee, Nömrög, Azarga Rivers (Buir Lake-Khalkh River-Khyangan region); Baidrag, Galuut Rivers (Valley of the Lakes). The species occurs in forest steppe, steppe, and oases in the Gobi Desert on migration (Molleson, 1908; Dorogostaiskii, 1908; Tugarinov, 1916; Kozlova, 1930 & 1932; Sushkin, 1938; Shagdarsuren, 1952; Eregdendagva, 1960; Piechocki *et al.*, 1981; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; ; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stenzel *et al.*, 2005; Boldbaatar, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 24,000-44,000 mature individuals. Global breeding and resident ranges are estimated at 18,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. They arrive in breeding sites by mid-April and late May. Breeding season begins mid-late June and continues to mid-August. This species nests on cliff ledges and trees near open water with amphibians, fishes, other aquatic vertebrates and invertebrates, in lake and river valleys and forest steppe (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They are solitary nesters. Breeding pairs choose the same nest for a few years. Therefore, the nest becomes very large and bulky. The nest is made of sticks, twigs, reeds, tall plants, and grass- tufts lined with moss, grass, cotton, and trash. Female lays 3-5, rarely 2-6 eggs of white colour with green inner membrane. Both adults incubate the eggs for 30-35 days. Both sexes care for and feed young on small rodents, young chicks of birds, frogs, toads, small to medium-sized fishes, and aquatic invertebrates in the nest for 63-71 days. Non-breeding birds occur near large rivers and lakes with fishes and other prey species in abundance in summer. On migration, young birds occur in marshes, temporary wetlands in the steppe, near large river and lakes. Migrating groups consisting of 3-12 individuals feed in wetlands from forest to Gobi Desert in Mongolia. They leave their breeding and summering sites for wintering grounds by early September – early October, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (inland) (5.1.-5.9., 5.13.-5.17. on migrations); 6. Rocky areas; 12. Artificial – Aquatic (12.2., 12.6., 12.7. and 12.9. on migrations).

Dominant Threats: 1. Habitat loss and degradation- 1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds are major threats, causing the species to abandon the site.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the

Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Forest and steppe fires may burn trees with nests in their breeding habitats near lakes and rivers.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several species of birds, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to eat the meat of this species or to make stuffed souve-nirs occasionally shoot it.

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution- 5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species.

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds near forest in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Eurasian Eagle-owl in the region prey upon chicks in the nest for night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance- 10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting the individuals that breeds.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1995. Listed in CITES Appendix II. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 9.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ciconiidae

59. Scientific Name: *Ciconia boyciana*

Species Authority: Swinhoe, 1873

Common Names: Oriental Stork or Oriental White Stork (English), Dornyn örövtas or kharkhushuut örövtas (Mongolian)

Global Status: Endangered, C2a(ii)

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable. The population size is unknown, however it is known to occur in a very limited area of eastern Mongolia.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Russian Federation (Amur), India, China, Mongolia, Bangladesh, Myanmar, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This is a rare summer visitor or passage migrant to north-eastern Mongolia, known only by the following records (by province): Ulz River valley (Dornod Mongol Daguur Strictly Protected Area) (Tseveenmyadag, 1998; Tseveenmyadag *et al.*, 2000; BirdLife International, 2001). Buir Lake (Hölönbuir), one record, undated (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold, 1997; BirdLife International, 2001); Khalkh River, Ih Khyangan region, undated (Dawaa *et al.*, 1994). Migrants occur in eastern Mongolia during the spring and autumn migrations. A very doubtful record is at Hustai Nuruu National Park.

Population: The global population consists of 1,000-2,499 mature individuals. Global breeding and resident ranges are estimated at 474,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a rare non-breeding summer visitor. The birds are found in lake and river valleys with tall vegetation and marshy areas, reed beds and shores in north-eastern and eastern Mongolia on migration. They feed on aquatic insects, grasshoppers and amphibians. Further research is needed into distribution, population and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.5.-5.8., 5.9., 5.14.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species occurs/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species /; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997) and included in both the International and Russian Red Books. Hunting this species has been prohibited since 1995. Listed in CITES Appendix I. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 22.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Threskiornithidae

60. Scientific Name: *Threskiornis melanocephalus*

Species Authority: (Latham, 1790)

Common Names: Black-headed Ibis or Oriental Ibis (English), Hurenturuut biluus (Mongolian)

Global Status: Near Threatened

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Russian Federation, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Republic of Korea, Cambodia, Hong Kong, Philippines, Japan.

Regional Distribution: Only one bird has been observed, at Khar-Us Lake of the Great Lakes Depression (Tseveenmyadag & Bold, 2006). This record is doubtful and documentation for the record is necessary.

Population: The global population consists of 20,000 mature individuals. Global breeding and resident ranges are estimated at 1,560,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: It is a vagrant for Mongolia. A single individual was reported on the lake shore. It feeds on various frogs, fishes and other water invertebrates including insects. It walks about actively on marshy land, probing with its bill into soft mud and often feeding in shallow water with its head momentarily submerged.

Habitat Type: 5. Wetlands (inland) (5.1., 5.5., 5.9., 5.14.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation- 1.1.4. Livestock-1.1.4.1. Nomadic; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement; 6. Pollution -6.3. Water pollution; 7. Natural disasters-7.1. Drought; 8. Changes in native species dynamics-8.2. Predators-8.5. Pathogens or parasites; 10. Human disturbance-10.4. Transport- 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It may migrate through some protected areas and Important Bird Areas in the west.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Threskiornithidae

61. Scientific Name: *Platalea leucorodia*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Spoonbill, Spoonbill or White Spoonbill (English), Tsagaagchin khalbagat or khalbagan khushuut (Mongolian)

Subspecies in Mongolia: *P. l. major*, *P. l. leucorodia* (see Dawaa *et al.* (1994); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Brazil, Trinidad and Tobago, Iceland, Cape Verde, Senegal, Western Sahara,

Mauritania, Gambia, Guinea-Bissau, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Bahrain, Burkina Faso, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, the Democratic Republic of the Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Ukraine, Bulgaria, Egypt, Turkey, Moldova, Republic of, Russian Federation, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Hong Kong, Taiwan, Republic of Korea, Japan, This species is possibly extinct regionally in Austria.

Regional Distribution: This species breeds at Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Bayan Lake (Altan els), Khar-Us, and Khar Lakes (Great Lakes Depression). It used to breed at Orog Lake (Valley of the Lakes). It migrates over Khovd River, Tolbo, Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River with reed beds (Great Lakes Depression); Zavkhan and Hungui Rivers (Desert-steppe Depression of Zavkhan); Tamir and Orkhon Rivers; and Sangiin Dalai and Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Orkhon, Selenge Rivers (Orkhon-Selenge basins); Onon, Balj, and Herlen Rivers (Hentii Mountain Range); BöönTsagaan, Taatsyn Tsagaan Lakes (Valley of the Lakes) (Kozlova, 1932; Bold, 1973; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). Birds were seen at Ganga Lake of Suhbaatar province (N. Tseveenmyadag pers. comm.).

Population: The global population consists of 66,000-140,000 mature individuals. Global breeding and resident ranges are estimated at 6,240,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. A total of 600-700 breeding pairs nest in Uvs Lake basin (MNE & JICA, 2001).

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives in breeding and summering sites by late April-early May. It nests in reed beds, marshy wetlands with reeds and bushes near lakes and rivers (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding begins in early- late May. The nest is a rough platform of reed stems and debris, or rarely of twigs. The female usually lays 4, rarely 3-6 eggs of a non-glossy white, sparsely spotted or blotched with reddish-brown. Both adults incubate the eggs for 21 days. Both sexes care for and feed young on adult and larval insects (e.g. water beetles, dragonflies, caddis flies, locusts and flies), molluscs, crustaceans, worms, leeches, frogs, tadpoles and small fish up to 10-15 cm long. It may also take algae or small fragments of aquatic plants (del Hoyo *et al.*, 1992). In breeding season, non-breeding or summering birds occur in small flocks of 4-9 individuals and feed in shallow water at edges of pools and freshwater and saline lake. On migration they occur singly, in pairs, or in groups of 6-26 individuals in open water areas of lakes and rarely large rivers in the steppe. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1.-5.3., 5.5.- 5.9., 5.14.-5.17.); 12. Artificial – Aquatic (12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation- 1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species breeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism

development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and wetlands. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Some people like to collect its head with beak and the stuffed head place on the wall and desk of a home and public service places.

4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned gill nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless and slow-moving chicks at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance- 10.4. Transport: Transport by boat, car and horse near breeding areas have been negatively affecting the breeding and non-breeding individuals.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1995. Listed in CITES Appendix II. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 9.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

62. Scientific Name: *Botaurus stellaris*

Species Authority: (Linnaeus, 1758)

Common Names: Great Bittern, Bittern or Eurasian Bittern (English), Usny bukhshuvuu or usny bukh (Mongolian)

Subspecies in Mongolia: *B. s. stellaris* (see Baker (1993) and Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. Habitat loss, drought and human disturbance present threats to this species. This species is likely to be upgraded to a threat category in the near future. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Iceland, Senegal, Gambia, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Ghana, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Tanzania, Uganda, Mozambique, Cyprus, Ethiopia, Malawi, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Palestinian Territory, Occupied, Tajikistan, India, Kyrgyzstan, Maldives, China, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, This species is regionally extinct in Turkmenistan.

Regional Distribution: This species breeds at Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); the lower part with dense reed beds (Tes River valley); Khar-Uus, Khar, Khyargas, Dörgön Lakes and the delta of Khovd River with reed beds (Great Lakes Depression); Zavkhan River with reed beds (Desert-steppe Depression of Zavkhan); Eastern part of Hövsgöl Lake, Orkhon and Selenge Rivers (Orkhon-Selenge basins); Onon, Balj, Herlen Rivers (Hentii Mountain Range); Ulz River and Sumiin Tsagaan, Höh, Galuut and Bus Lakes (Herlen-Ulz valleys); Khalkh, Degee, Nömrög, Azarga Rivers and Buir, Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) and Bööntsagaan Lake (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi). The species occurs in various wetlands with reed beds from Mongol-Altai to Buir Lake-Khalkh River-Khyangan region migration (Kozlova, 1930; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993 Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 110,000-340,000 mature individuals. Global breeding and resident ranges are estimated at 18,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in breeding and summering sites by late April-early May, depending on weather conditions. Breeding begins in mid-May to early June. They breed in reed beds and tall vegetation at the edge of fresh water. The nest is placed on the ground, usually in shallow water in a reed bed (Bold *et al.*, 2005; Gombobaatar, 2012). Males are polygamous, each mating with up to five females. The nest is a pile of reeds, sedges and similar material, lined with finer material. The nest is built by the female alone. The female lays 4-6, rarely 3-7 eggs of non-glossy olive-brown with sometimes darker brown fine sprinkles at larger end. The eggs are incubated by the female alone for 25-26 days. Young are tended by female only. Young can leave nest and move around at 2-3 weeks, becoming independent at 8 weeks. They feed on fishes, amphibians, aquatic insects and other arthropods along the reed margins in shallow water. On migration, they occur singly in dense reed beds and dense low bushy areas near lakes, rivers, pools and ponds. They leave the breeding site for wintering grounds by late August-early September. On migration, individuals occur in tall vegetated areas near wetlands, dense bushes, shrubs and young willow trees.

Habitat Type: 5. Wetlands (inland) (5.3.-5.5., 5.7.-5.9., 5.13.); 11. Artificial – Terrestrial (11.3.); 12. Artificial – Aquatic (12.2., 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through the water contaminated by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing mass fish mortality events/, 1.7. Fires /forest and steppe fires burn grasses and reed beds in their breeding habitats near lakes and rivers. Fires may burn nests with eggs and young/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Grey Wolf (*Canis lupus*), and Eurasian Badger (*Meles meles*) in the region easily prey upon both adults and chicks in breeding and on migration/, 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

63. Scientific Name: *Ixobrychus minutus*

Species Authority: (Linnaeus, 1766)

Common Names: Little Bittern (English), Bichil odoibukh or odoi bukh (Mongolian)

Subspecies in Mongolia: *I. m. minutus* (see Baker (1993) and Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. Only a few birds breed and migrate through eastern and western Mongolia and habitat loss, drought and human disturbance present threats to this species. This species is likely to be upgraded to a threat category in the near future. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Barbados, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau,

Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Mongolia, Bangladesh, Australia, New Caledonia, New Zealand.

Regional Distribution: It breeds at Khar-Us, Khar, Khyargas, and Airag Lakes and at the delta of Khovd River with reed beds (Great Lakes Depression). It migrates through Uvs Lake and the delta of Tes River (Northern Uvs Depression), the breeding areas, Khalkh, Degee, Nömrög, Azarga and Galdastai Rivers; Buir, Tashgain Tavan and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010). A single bird was photographed in Udleg valley, Batsumber sum of Töv province in June 2009 (Ch.Uuganbayar pers. comm., 2009). This species rarely occurs in steppe and oasis on migration (R. Samiya, pers. comm.).

Population: The global population consists of 76,000-610,000 mature individuals. Global breeding and resident ranges are estimated at 29,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and migrating individuals arrive in summering and breeding sites by late April-early May. Breeding begins in early-mid-May. It breeds on fresh water bordered with reeds and thickets. Solitary, but pairs may nest fairly near each other. The nest is placed on the ground in reed beds or floating vegetation or in low branches of swamp shrubs, just above water level. Breeding ecology is poorly studied in Mongolia. According to Harrison (1975), the nest is a shallow and slight saucer of sedges, reeds and plant-stems, lined with finer plant material. The female usually lays 5-6 eggs of non-glossy white colour. The eggs are incubated by both sexes for 16-19 days. Both adults feed young on fishes, small frogs, and aquatic arthropods in the nest for 7-9 days. The young can fly at c. 30 days. On migration, individuals occur in areas with reed beds along river and lake valleys or tall plants in open steppe. They leave their breeding and summering sites for wintering grounds by late August-early September.

Habitat Type: 5. Wetlands (inland) (5.3.- 5.5., 5.7.-5.9., 5.13.); 12. Artificial – Aquatic (12.2., 12.9).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through the water contaminated by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing mass fish mortality events/, 1.7. Fires /forest and steppe fires burn grasses and reed beds in their breeding habitats near lakes and rivers. Fires may burn nests with eggs and young/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all

over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 21.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

64. Scientific Name: *Ixobrychus eurhythmus*

Species Authority: (Swinhoe, 1873)

Common Names: Schrenck's Bittern (English), Börtöt odoibukh or börtöt deglii (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Italy, Russian Federation, China, Mongolia, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau.

Regional Distribution: This species is considered a vagrant: an individual has been documented at the Mongol Daguur Strictly Protected Area, Dornod province in June, 1995 (Boldbaatar, 2001). A.Bräunlich and R. Reading observed a male at the Herlen River near Choibalsan on 9 June 1998 (A. Bräunlich, pers. comm.).

Population: The global population consists of 1,000-25,000 mature individuals (BirdLife International, 2011). There is only one record in Eastern Mongolia in 1995.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this is a vagrant. The species occurs in reed beds in the valleys of Ulz and Herlen Rivers; and Höh and Buir Lakes on migration. It feeds on small fishes, young frogs and aquatic arthropods at edges of lakes and rivers. It might occur in dense reed beds and tall vegetated lake and river valleys, and near water resources and planted trees in eastern Mongolian steppe on migration. Habitat Type: Potential habitats are 5. Wetlands (inland) (5.3., 5.4., 5.7.-5.9.).

Dominant Threats: Potential threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species /; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been

polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters-7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, this species occurs in some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

65. Scientific Name: *Nycticorax nycticorax*

Species Authority: (Linnaeus, 1758)

Common Names: Black-crowned Night-heron (English), Nogoovor zashin or nogoovor deglii (Mongolian)

Subspecies in Mongolia: *N. n. nycticorax* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands, British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Zambia, Ukraine, Bulgaria, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, French Southern Territories, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam,

Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Northern Mariana Islands, Federated States of Micronesia.

Regional Distribution: A.Bräunlich recorded a single bird at Khar Lake of Khovd province on 29 May, 1995 (Bold & Mainjargal, 2006). He also saw a flock of five immature birds, landing in the Naadam stadium at Dalanzadgad town on 14 June, 2004 (A. Bräunlich pers. comm.). S.Gombobaatar photographed a bird at Ögii Lake of Övörkhangai province on 06 August, 2006 and saw a single bird at Bööntsagaan Lake of Bayankhongor province on 10 August, 2007 (S. Gombobaatar pers. comm. and photographs). One dead individual of the species was found by S.Dorjderem at c. 230 km to the SE of the Dalanzadgad town of Ömnögobi province on 11 May, 2009 (S.Dorjderem pers. comm.).

Population: The global population consists of 510,000 - 3,600,000 mature individuals. Global breeding and resident ranges are estimated at 52,400,000 km² (BirdLife International, 2011). The above-mentioned scattered few individuals were observed in Mongolia. Population is unknown in Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: The species is considered vagrant for the country. The species occurs in dense reed beds and tall vegetated lake and river valleys, and near water resources and planted trees in the Gobi Desert on migration. They feed on small fishes, young frogs, terrestrial and aquatic insects on migration in shallow water on the edges of freshwater lakes and rivers.

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.3., 5.4., 5.7.-5.9.).

Dominant Threats: Potential threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species /; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, this species occurs in some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

66. Scientific Name: *Butorides striatus*

Species Authority: (Linnaeus, 1758)

Common Names: Striated Heron, Green Heron or Green-backed Heron (English), Nogoön deglei (Mongolian)

Subspecies in Mongolia: *B. s. amurensis* (see Howard & Moore (1994) for further details)

Synonyms: *B. striata* (Linnaeus, 1758), *B. sundevalli* (Reichenow, 1877)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Mexico, Costa Rica, Panama, Peru, Ecuador, Columbia, Chile, Brazil, Argentina, Venezuela, Bolivia, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, French Guiana, South Georgia and the South Sandwich Islands, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Mali, Liberia, Cote d'Ivoire, Saint Helena, Burkina Faso, Ghana, Togo, Niger, Benin, Nigeria, Cameroon, Gabon, Sao Tomé and Principe, Equatorial Guinea, Congo, the Democratic Republic of the Congo, Angola, Namibia, Chad, Central African Republic, South Africa, Botswana, Sudan, Zambia, Egypt, Zimbabwe, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Malawi, Ethiopia, Kenya, Israel, Eritrea, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Oman, Réunion, Seychelles, Mauritius, Pakistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Taiwan, Philippines, Japan, Papua New Guinea, Solomon Islands, New Caledonia, Fiji, Democratic People's Republic of Korea, Republic of Korea, French Polynesia.

Regional Distribution: This species is found at Buir Lake of Dornod province (Tsevenmyadag & Bold, 2006). This had been documented but the record is undated. Future documentation for the species will be essential.

Population: The global population consists of 150,000-1,200,000 mature individuals. Global breeding and resident ranges are estimated at 46,200,000 km² (BirdLife International, 2011). There is only one record in Mongolia; population is unknown for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this is a vagrant. It inhabits dense reed beds and areas with tall vegetation in lake and river valleys, and near water resources and planted trees in the steppe on migration. They feed on small fishes, young frogs, terrestrial and aquatic insects in shallow water on the edges of freshwater lakes and rivers. On migration, they occur singly. It also might occur in tall vegetated areas in open steppe in the east.

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.3., 5.4., 5.7.-5.9.); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, this species may occur in some protected areas and Important Bird Areas in eastern Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes
Family: Ardeidae

67. Scientific Name: *Ardeola bacchus*

Species Authority: (Bonaparte, 1855)

Common Names: Chinese Pond-heron (English), Tsagaan devlee or tsagaan sakhlag deglii (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

Global Distribution: Russian Federation, India, China, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Regional Distribution: This species is found near rivers with reed beds, tall grass and dry steppe on migration in Buur River valley of Selenge province on Russian border (Dawaa *et al.*, 1994), Bööntsagaan Lake (Valley of the Lakes) on 18 June, 2004 (Bold, 2005), and Hentii Mountain Range (Tseveenmyadag *et al.*, 2005), in Darkhan sum of Hentii province (46°28'12.72"N; 109°26'34.80"E) (Middle Khalkh Steppe) on 16 May, 2006 (Gombobaatar *et al.*, 2007). Two non-breeding individuals were noted at Kholboolj Lake of Bayankhongor province on 5 October in 2006, and a non-breeding individual miles from any water source in NE Övörkhongai province on 6 October, 2006 (M.Gilbert pers. comm.). An individual was collected at Herlen River close to the above location (N.Tseveenmyadag pers. comm.). A non-breeding bird was recorded by Mr James Lidster, a tour leader of Sunbird at Bööntsagaan Lake of Bayankhongor province on 6 and 8 June, 2007 (<http://birdsmongolia.blogspot.com>). A single bird was photographed by Tumendelger Khumbaa at the Juulchin Gobi Tourist camp, located 38 km from the provincial capital Dalanzadgad on 9 May, 2009. One individual of the species was documented by Dorjderem Sukhragchaa at c. 230 km to the SE of the Juulchin Gobi Dalanzadgad on 8 May, 2009 (Kh.Tumendelger & S.Dorjderem pers. comm.). Two birds were seen at Tuul River (47°40'04.5"N; 106°05'24.8"E) in the Hustai National Park on 25 August, 2008 (S.Gombobaatar and D.Usukhjargal pers. comm. and photographs). Three birds were photographed at dried river beds of the Yeröö River of Mandal sum in Selenge province on 5 June, 2010. S.Gombobaatar photographed a single non-breeding adult near the pond of Sangiin Dalai Lake of Övörkhongai province 20 August, 2010 (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 25,000-1,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia. However, in recent years, the number of records has been increasing in Mongolia due either to increasing field observations or to extension of its distribution within the country. These records show that it migrates through C&W Mongolia and it is not a rare vagrant for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this is a vagrant. It occurs in dense reed beds, areas with tall vegetation in the lake and river valleys, open areas near water resources and planted trees from forest steppe to Gobi Desert on migration. They are found singly, or in very loose groups of 2-3 individuals on migration. They feed on small fishes, young frogs, aquatic and terrestrial arthropods in shallow water areas of lakes, river, ponds and pools.

Habitat Type: 5. Wetlands (inland) (5.3., 5.4., 5.7.-5.9.); 11. Artificial – Terrestrial (11.3.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2.

Human settlement; 4. Accidental mortality- 4.2 Collision -4.2.1 Pylon and building collision /a collided bird was found underneath 35 KV power line in open steppe at Darkhan sum of Hentii province during spring migration/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

68. Scientific Name: *Bubulcus ibis*

Species Authority: (Linnaeus, 1758)

Common Names: Cattle Egret (English), Khotny degel (Mongolian)

Subspecies in Mongolia: *B. i. coromandus* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Synonyms: *Ardea ibis*, *Ardeola ibis*

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Ethiopia, Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Montenegro, Serbia, Albania, Antarctica, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Sudan, Zambia, Bulgaria, Belarus, Egypt, Zimbabwe, Turkey, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Islamic Republic of Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Pakistan, Tajikistan, India, British Indian Ocean Territory, Maldives,

China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, New Caledonia, Marshall Islands, United States Minor Outlying Islands, New Zealand, Norfolk Island. It is classified as a regionally extinct vagrant in Bulgaria.

Regional Distribution: In Mongolia, single individuals were found at Orog Lake of Bayankhongor province (Tseveenmyadag & Bold, 2006) and at Bööntsagaan Lake of Bayankhongor province on 30-31 July, 2000 (L. Majorel and A.Bräunlich pers. comm.). Matthieu and Annaïg, two French birdwatchers, found a single individual at Ögii Lake of Övörkhangai province in early July of 2007 (<http://birdsmongolia.blogspot.com>). M.Gilbert and his team observed one non-breeding individual in Khurkh River valley of Hentii province (48.42535°N; 110.58864°E) on 14 July, 2010 (D. Batmunkh pers.comm.)

Population: The global population consists of 3,800,000 - 7,600,000 mature individuals. Global breeding and resident ranges are estimated at 62,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this is a vagrant. Migrating birds were recorded by edges of dense reed beds, in areas with tall vegetation in lake and river valleys, or near water points and planted trees in Gobi lakes on migration. They feed on small fishes and aquatic invertebrates in shallow water near edges of fresh water or saline lakes, rivers and pools.

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.3., 5.4., 5.7.-5.9.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species /; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /see 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: It is found outside of protected areas in Mongolia. But they migrate through some Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

69. Scientific Name: *Ardea cinerea*

Species Authority: Linnaeus, 1758

Common Names: Grey Heron, Common Heron or Gray Heron (English), Hög deglii (Mongolian)

Subspecies in Mongolia: *A. c. cinerea* (see Baker (1993) and Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009 - Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Brazil, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands.

Regional Distribution: This species breeds at Buyant and Khovd Rivers and Khoton, Tolbo, Dayan, Achit and Uureg Lakes (Mongol-Altai Mountain Range); parts of Khovd and Böhömörön Rivers (small lakes and rivers) (Kharkhiraa and Turgen Mountains); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River with reed beds (Great Lakes Depression); Zavkhan River with reed beds and meadow and Hungui River with meadow and patchy birch trees (Desert-steppe Depression of Zavkhan); Tamir and Orkhon Rivers and Sangiin Dalai (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Telmen, Khar Lakes with wide shores and valleys (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid River and Dood Lake (Darkhad Depression); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge basins); Tuul, Onon, Balj, and Herlen Rivers (Hentii Mountain Range); Ulz, Döch Rivers and Sumiin Tsagaan, Höh, Döröö, Galuut, Bus Lakes (Herlen-Ulz valleys); Khalkh, Degee, Nömörög, Tsagaan Chuluut, Mogoit, Azarga Rivers and Buir, Shavar Lakes, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Taatsyn Tsagaan Lakes (Valley of the Lakes) (Dorogostaiskii, 1908; Buturlin, 1913; Tugarinov, 1916 & 1929; Kozlova, 1930 & 1932; Tugarinov, 1932; Sushkin, 1938; Dementiev *et al.*, 1966; Shagdarsuren, 1969; Bold & Eregdendagva, 1970; Sumiya, 1971; Bold, 1973; Skryabin & Sumiya, 1976; Ganbat, 1978; Sumiya & Piechocki *et al.*, 1981; Erdenebat, 1989; Skryabin, 1989; Bold, 1977; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Sumiya & Skryabin, 1989; Tseveenmyadag *et al.*, 2000; Tsegmid & Uuganbayar, 2006; Sumiya, 2002; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stenzel *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010). It migrates through the breeding areas and wetlands in forest steppe, steppe, and Gobi Desert, including oasis and excluding taiga and high mountains.

Population: The global population consists of 790,000-3,700,000 mature individuals. Global breeding and resident ranges are estimated at 99,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding birds arrive in the breeding sites by late March - early May, depending on weather conditions. Mass migration occurs by early April. Breeding begins in early May-late May. The nests may be close to each other, a number occurring in one tree if sites are available. High trees are often used, but nests also occur in low trees, in bushes, on cliff ledges, small islands, or on the ground and in reed beds (Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They nest in colonies in reed beds near lakes, rivers and on islands. Mixed colonies of Grey Heron, Great Cormorant and Mongolian Gulls on islands occur in the country. The nest is a twig platform with a shallow hollow centre. In the first year it may be thin enough for eggs to show through, but it is usually re-used and added to annually, becoming very bulky. The nest is made of fairly substantial twigs and small branches, with ends protruding untidily, lined with thinner twigs, occasionally with grass roots or similar material. The male brings twigs to the nest and the female builds them in. The female usually lays 3-5, rarely 2-7 eggs of non-glossy pale greenish-blue colour. Parents incubate the eggs for 23-28 days in the nest. Nestlings stay in the nest or close to the nest at the early stage. Then they move around the breeding island near their nest. Both adults and young birds feed on small mammals, young chicks of passerines, frogs, small to medium sized fishes and aquatic invertebrates. They often wait motionless for prey or slowly stalk the victim. Migrating individuals occur singly or in loose groups in large swampy lakes with reed beds, deltas of large lakes and rivers, or shores and edges of wetlands on migration. They leave their summering and breeding sites by early September-mid-October, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4.-5.9., 5.13.- 5.17.); 12. Artificial – Aquatic (12.2., 12.6., 12.9. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through contamination by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing mass mortalities of fishes. This may already have begun to affect piscivorous birds/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /ponds, islands of saline and freshwater lakes with reed beds drying out/; 8. Changes in native species dynamics- 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes
Family: Ardeidae

70. Scientific Name: *Ardea purpurea*

Species Authority: Linnaeus, 1766

Common Names: Purple Heron (English), Zeerd deglii (Mongolian)

Subspecies in Mongolia: *A. p. manilensis* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation in eastern Mongolia. This species is likely to be upgraded to a threat category in the near future. The number of breeding pairs in Khalkh River delta in eastern Mongolia has been decreasing due to drought and overgrazing. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Brazil, Barbados, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species nests at Khalkh River and Buir Lake. O.Goroshko, Russian ornithologist, recorded the first breeding of the species at Khalkh River/Buir Lake in July 2003. The pair had three chicks in its nest located in dense reed beds (Goroshko, 2004). A.Bräunlich observed and photographed at least adult 7 individuals in the Khalkh River Delta at Buir Lake on 6 August, 2010. The herons were commuting between their presumed breeding sites in the delta and some feeding grounds a few kilometer away (A.Bräunlich pers. comm. and photographs). It migrates through Khalkh, Degee, Nömrög River valleys and Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Fomin&Bold, 1991; Dawaa *et al.*, 1994), also Tsagaan Lake of Bayannuur (Bräunlich, 2006a) and lower Ulz River, Mongol Daguur SPA and Ögii Lake (N. Tseveenmyadag pers.comm.). Two adults were seen and photographed at Buir Lake of Dornod province, presumably breeding there on 22 July, 2009 (S. Gombobaatar pers. comm. and photographs)

Population: The global population consists of 270,000 - 570,000 mature individuals. Global breeding and resident ranges are estimated at 22,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a rare breeding visitor in eastern Mongolia. Breeding begins in mid-May. This species nests in reed beds on islands and river deltas (Goroshko, 2004). Breeding ecology of the species has not been well studied in Mongolia. Harrison (1975) described its breeding ecology as follows: it builds its nest with reed stems, or when in bushes or trees uses twigs like Grey Heron. The female usually lays 4-5, sometimes 3-8 eggs. The egg is elliptical to sub-elliptical in shape and non-glossy pale greenish-blue in colour. Both sexes incubate the eggs for 24-28 days. Both parents feed young. The young are able to fly at c. 42 days and live independently at 60 days. Both adults and young birds feed on small mammals, frogs, small to medium sized fishes, and aquatic invertebrates. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. On migration, they occur in wetlands in the steppe and in river valleys and lakes in eastern Mongolia.

Habitat Type: 5. Wetlands (inland) (5.1., 5.5., 5.7., 5.9., 5.14., 5.16.).

Dominant threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /drought of ponds, islands of saline and freshwater lakes with reed beds/; 8. Changes in native species dynamics- 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 19.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

71. Scientific Name: *Egretta alba*

Species Authority: (Linnaeus, 1758)

Common Names: Great Egret or Great White Egret (English), Tsasch deglee or tsasch deglii (Mongolian)

Subspecies in Mongolia: *E. a. alba* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Synonyms: *Ardea alba* (Linnaeus, 1758), *Casmerodius albus* (Linnaeus 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, South Georgia and the South Sandwich Islands, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, Botswana, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea, Solomon Islands, New Caledonia, New Zealand, Fiji.

Regional Distribution: It breeds at Tes, Torkholig Rivers (Northern Uvs Depression); Khar-U, Khar, Dörgön Lakes and the delta of Khovd River (Great Lakes Depression). It migrates through breeding areas and Zavkhan River valley (Desert steppe depression in Zavkhan); Ögii Lakes (Khangai Mountain Range); Bööntsagaan and Orog Lakes (Valley of the Lakes); Ögii Lake (Khangai Mountain Range); Buir, Bayan and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region), (Kozlova, 1930; Piechocki *et al.*, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 590,000-2,200,000 mature individuals. Global breeding and resident ranges are estimated at 74,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and migrating individuals arrive in breeding and summering sites by late April-early May. Breeding begins in late May-early June. Breeding habitats are large reed beds near shallow water. They nest usually in large tracts of reeds, in water 1-1.2 m deep, more rarely on shrubs or trees. Sociable, but with nests scattered individually some way apart, in loose association. The nest is a large structure of dead reed stems, built up several feet above water level, or of twigs in tree nests which are thinner than those of the larger heron species. Female lays 3-4, rarely 5-6 eggs of a non-glossy pale blue colour. Both adults incubate the eggs for 25-26 days. Both parents care for and feed young on small to medium-sized mammals, frogs, fishes and aquatic invertebrates for c. 42 days in the nest. The young can fly at 5-6 weeks. The Great Egret feeds in shallow water or drier habitats. It spears prey with its long, sharp bill. It will slowly stalk its victim or wait motionless, allowing the prey to come within striking distance. Migrating individuals occur singly, or in very loose groups in large swampy lakes with reed beds, deltas of large lakes and rivers, or shores and edges of wetlands on migration. They leave their summering and breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.2., 5.4., 5.5. -5.9., 5.13., 5.14., 5.16.); 12. Artificial – Aquatic (12.2., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success through contamination by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing mass mortalities of fishes. This may already have begun to affect piscivorous birds/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2 Collision -4.2.1 Pylon and building collision /collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /ponds, islands of saline and freshwater lakes with reed beds drying out/; 8. Changes in native species dynamics- 8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1995. It was covered by the Rare bird Mongolian Governmental Act No. 264 in 2001. Approximately 20.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Ciconiiformes

Family: Ardeidae

72. Scientific Name: *Egretta garzetta*

Species Authority: (Linnaeus, 1766)

Common Names: Little Egret (English), Khurgan deglee or khurgan tsagaan deglii (Mongolian)

Subspecies in Mongolia: *E. g. garzetta* (see Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Suriname, Saint Pierre and Miquelon, Greenland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-

Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, United Republic of, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, India, Maldives, China, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Northern Mariana Islands, Federated States of Micronesia, New Zealand.

Regional Distribution: Single birds were recorded at Khalkh River delta of Dornod province in June 1995 (Bold & Tseveenmyadag, 2002; Bold & Mainjargal, 2006) and on 7 June 1999 (A.Bräunlich pers. comm.).

Population: The global population consists of 659,000-3,140,000 mature individuals. Global breeding and resident ranges are estimated at 39,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this is a vagrant. It has occurred at edges of reed beds and areas with tall vegetation of lake and river valleys on migration in eastern Mongolia. This species feeds on small fishes, frogs and aquatic invertebrates in shallow water areas. On migration, this species can probably be found in areas with reeds, tall plants, and dense low bushes near wetlands in the eastern part of the country.

Habitat Type: Potential habitats are 5. Wetlands (inland) (5.3., 5.4., 5.7.- 5.9.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds of freshwater lakes and pools/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement;
4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /the widespread use of illegal gill nets presents a direct hazard to the species /;
6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been polluted and are drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/;
7. Natural disasters- 7.1. Drought /see 6.1.1./;
8. Changes in native species dynamics-8.3. Prey and food base /a lack of food base associated with human activities/, 8.5. Pathogens or parasites /highly pathogenic avian influenza/;
10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It probably migrates through protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Pelecaniformes

Family: Pelecanidae

73. Scientific Name: *Pelecanus crispus*

Species Authority: Bruch, 1832

Common Names: Dalmatian Pelican (English), Bortsgor khoton (Mongolian)

Global Status: Vulnerable, A2ce+3ce

Regional Status: Critically Endangered, C2a(i)

Rationale for Assessment: This species has been assessed as Critically Endangered, C2a(i), because the population is undergoing a continuing decline and there are thought to be less than 50 mature individuals in the largest subpopulation. This is primarily due to high levels of poaching and habitat loss. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Critically Endangered, C2a(i)

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Western Sahara, Spain, Algeria, Norway, Italy, Czech Republic, Poland, Croatia, Bosnia and Herzegovina, Slovakia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Ukraine, Bulgaria, Egypt, Turkey, Republic of Moldova, Russian Federation, Cyprus, Israel, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Mongolia, Hong Kong, Taiwan, Republic of Korea, Japan, This is a regionally extinct vagrant in Hungary and is regionally extinct in Austria, Germany. It is possibly extinct regionally in Bangladesh.

Regional Distribution: This species breeds at Khar-Us, Shuvuun Tsuglaan Lake (c.40 pairs breeding in 1976) (Ostapenko *et al.*, 1977; Crivelli and Vizi, 1981; Bold, 1997) and up to 23 in July-August, 1992 (C. Bealey *in litt.* 1999; BirdLife International, 2001), Airag Lake (19 adults and five occupied nests in June 1995 (A. Bräunlich *in litt.* 2000; BirdLife International, 2001), 23 adults and 2-3 occupied nests, and probably a fourth unoccupied nest in June 1998, 5 adults and 2 juveniles in September, 1998 (C. Liegl *per A.* Bräunlich *in litt.* 2000; BirdLife International, 2001), 31 birds (24 adults and 7 young) in 1999 (U. Koeppen *per A.* Bräunlich *in litt.* 2000; BirdLife International, 2001), 14 adults, 8 nests and 7 pulli, a nest with a dead pullus, 2 nests with clutches of one and two eggs in July, 1999 (H. Mix *per A.* Bräunlich *in litt.* 2000; BirdLife International, 2001), 8 young birds and three of unknown age in August, 1999 (C. Liegl *per A.* Bräunlich *in litt.* 2000; BirdLife International, 2001); Khar, and Dörgön Lakes (Great Lakes Depression (Fomin & Bold, 1991; Dawaa *et al.*, 1994; BirdLife International, 2001; Nyambayar *et al.*, 2007). For Airag Lake, on 24 June of 1998, Liegl (1998) recorded 23 individuals, but in the following two days only six were seen at a time. In 1999, some researchers found flightless pelican nestlings on Bombogor Island. This was the last known breeding event by Dalmatian Pelicans in Western Mongolia until recently. There was a single pelican in Airag Lake on 6 July 2004, but the lake was not scrutinized for breeding evidence. However, in September 2006, Martin Gilbert of the Wildlife Conservation Society (WCS) found a dead young pelican (old carcass from this year) in almost the same area. The head of this bird had been chopped off by a local man (Nyambayar *et al.*, 2007). It migrates through Khyargas (10 birds in 1976) (Bold, 1997); 2 adults in June, 1995 (BirdLife International, 2001); Ereen and Taigam lake (Great Lakes Depression), Uvs Lake (Uvs Lake Depression) (a single bird in 1985, (Bold, 1997); Khovd Chono KharaiKh River delta & Khar Lake (one adult in June 1995), the delta of Khovd River, Khar-Us Lake (two adults in June 1995) (A. Bräunlich *in litt.* 2000; BirdLife International, 2001); Khar-Us Lake, Shuvuun Tsuglaan Lake (over 300 birds were seen in summer 1956, 207 in 1972 and 13 in 1981 (Bold, 1997); a few birds were seen flying high over the lake in June 1974 (Piechocki *et al.*, 1981); Bayan Lake (immature birds may occur) (Bold, 1997); eastern side of Agwash swamp (one adult in June, 1995) (A. Bräunlich *in litt.* 2000; BirdLife International, 2001); Oigon Lake, Zavkhan (13 birds in 1976) (Bold, 1997); Zavkhan River on migration (Bold 1997); Ögii Lake

of Övörkhongai province (immature birds may occur) (Bold, 1997); Bööntsagaan Lake of Bayankhongor province, 120 km NW of Orog Lake (Piechocki, 1968); Kholbooj lake of Bayankhongor province (50 birds in autumn, 1979) (Bold, 1997); Orog Lake of Bayankhongor province (recorded in 1926) (Kozlova 1932); (3 birds with scarlet bills typical of breeding birds, but no evidence of breeding in April-May, 1977) (Kitson, 1978); Taatsiin Tsagaan Lake of Bayankhongor province (6 birds in May, 1977 (Kitson, 1978; BirdLife International, 2001). One immature pelican was seen in Sangiin Dalai Lake, north-east Övörkhongai province on 20 August, 2007, an individual was photographed by S.Gombobaatar at a pond near Steppe Nomads tourist camp in Bayandelger sum/ Baganuur district in Herlen River valley on 6 July, 2008. Sh.Boldbaatar (MAS) saw the same bird at the same site a few days after S.Gombobaatar's observation in 2008 (S.Gombobaatar pers.comm., 2008) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Boldbaatar, 2008; Nyambayar *et al.*, 2007; A. Bräunlich, pers. comm., Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 10,000-13,900 mature individuals. Global breeding and resident ranges are estimated at 298,000 km² (BirdLife International, 2011). The highest number of the species ever observed was recorded at Airag Lake, Western Mongolia, consisting of 31 birds (24 adults and 7 young) in 1999, and successful breeding records include 8 nests with 7 chicks, 1 nest with a chick, and 2 nests with 1-2 eggs in July, 1999 (A. Bräunlich, 2000; BirdLife International, 2001). The latest unpublished data indicates that there are now about 200 Pelicans in Mongolia (Bold, 1997). In 1950-1970, 200-400 pairs nested in Mongolia. The number of the species then declined swiftly in Mongolia and remains at about 200 individuals (MNE & JICA, 2001).

Regional Population Trend: Decreasing, compared to previous data.

Habitats & Ecology: In Mongolia, this is a rare breeding visitor. The species arrives at breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June and continues into August. It breeds by large stretches of water on low sandbanks or islands, or in drier raised areas in reed beds (Tseveenmyadag *et al.*, 2010; Bold, 1997; Nyambayar *et al.*, 2007). The nest is usually placed in a secluded site, or occasionally on the edge of a colony of Cormorant. They nest in small colonies of a few pairs, occasionally solitary pairs. The nest size is variable but is usually a large heap of material-reeds, grass, sticks, or stones, brought by the male and built in by the female. The final mass is consolidated at times by droppings. Floating island nests may settle deeper into the water as the young grow and weight increases. The female lays 2-4, rarely 5-6 eggs with long elliptical to long sub-elliptical shape, white colour with an uneven chalky outer layer, becoming scratched and stained. The eggs are incubated mostly by the female with short sessions by the male, for 30-32 days. Young hatch over a long period and are of different sizes within the brood. Young can swim if alarmed from the second week, becoming independent at c. 10-14 weeks. Both adults and young feed chiefly on small and medium-sized fishes in freshwater lakes and pools. Just after breeding season, family members continue to forage together. In the non-breeding season, individuals occur in freshwater lakes and ponds with fishes, or saline lakes in open steppe on migration. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. The number of breeding pairs has been dramatically declining in the areas where they used to breed in western Mongolia, due to habitat loss and human disturbance over the last decade. Over the last few years, single and non-breeding birds have been recorded in the above-mentioned areas, including Khar-Us and Airag Lakes, where the species was last known to breed.

Habitat Type: 5. Wetlands (inland) (5.1., 5.5., 5.6., 5.14.); 12. Artificial – Aquatic (12.9.)

Dominant Threats: 1.Habitat Loss and Degradation (human-induced)

1.1.4.1. Nomadic Livestock -1.3.1. Mining extraction- 1.4.3. Infrastructure development such as tourism/recreation: This species is threatened by disturbance from tourists and fishers, wetland alteration and destruction, water pollution, collision with overhead power-lines and over-exploitation of fish stocks (Bold, 1997; Crivelli *et al.*, 1999; Hatzilacou, 1993; Mix & Bräunlich, 2000). Nowadays, however, livestock impacts have become a great concern for the protected areas administration (Khar-Us Lake PA) because livestock numbers have dramatically increased in the last decade and pasture management is not well developed in the breeding areas like Airag Lake. Over 30,000 head of livestock from Chandmani, Mankhan, Buyant and Jargalant districts graze on the islands and inhabit the area until the end of spring in the Tsagaan River area in the southern part of Khar-Us River, and in the Nariin River area in the north-western part of the

same area, where pelicans regularly summer and attempt to breed. Mandal Island, where some pelicans were observed roosting in August 2005, was full of cattle, horse dung and hoof prints (Bold, 1997; Nyambayar *et al.*, 2007). In summer, livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species occurs. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes. Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds/moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources. The loss of inflow from the Zavkhan River and the receding water levels have already led to localized fish mortalities along the channel that formerly connected Zost Lake to the main lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). This high mortality of fishes in the area is a cause of the low breeding success of breeding birds and disappearance of migrants.

1.7. Fires: Forest and steppe fires may burn breeding habitats near lakes and rivers.

3. Harvesting (hunting)-3.4. For Materials -3.5.1. Local trade for cultural/ leisure activities: Hunting by herders for traditional use of the bill continues to threaten the regional population in Mongolia (Bold, 1997; Mix & Bräunlich, 2000). Nomads use the upper mandible of pelican bills to groom their horses because they believe that using the pelican beak makes their animals stronger and faster. The price of one pelican is equal to 10 horses and 30 sheep in the Mongolian countryside (Nyambayar *et al.*, 2007).

4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Khar Lake. The widespread use of illegal gill nets is a direct hazard to this species. Abandoned nets along the lake shores are a hazard both to local livestock and to Pelicans. Gilbert *et al.* (2009), Batmunkh *et al.* (2010) mentioned that the herders around the southwestern shores of Khar Lake were extensively ice-fishing at the site during the winter months. This may have a great effect on piscivorous species and have the potential to devastate local fish stocks.

4.1.2.2. Shooting: Two current human uses of wetlands have a major impact on the species: fishing and Muskrat (*Ondatra zibethicus*) farming (Nyambayar *et al.*, 2007).

6. Pollution (affecting habitat and species) -6.1.1. Global warming - 6.3.2. Domestic water pollution: Global warming and domestic water pollution are potential threats to the species in breeding sites. Breeding success is being affected by water level fluctuations and degradation of shoreline vegetation.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Great Lakes Depression, Valley of the Lakes, Khangai, Hentii, Hövsgöl Mountain Ranges, and Eastern Mongolian Plain.

8. Changes in native species dynamics- 8.2. Predators: High predation of eggs and fledglings by, for example, gulls and foxes (8.2.) (Bold, 1997).

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

9. Intrinsic factors- Poor recruitment/reproduction (9.2), high juvenile mortality (9.3), low densities (9.5), restricted range (9.9) and natural disasters like drought (7.1) constitute threats to this species.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area in the area. There were vehicle tracks all over an island where three pelicans were roosting in summer in the Nariin River area. Therefore, the protection of islands seems important (Nyambayar *et al.*, 2007).

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting of this species has been prohibited since 1953. Listed in CITES Appendix I and CMS Appendix I and II. Approximately 13.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Pelecaniformes

Family: Phalacrocoracidae

74. Scientific Name: *Phalacrocorax carbo*

Species Authority: (Linnaeus, 1758)

Common Names: Great Cormorant or Cormorant (English), Turag gogoi (Mongolian)

Subspecies in Mongolia: *P. c. sinensis* (see Baker (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by flooding, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Canada, United States, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea, Solomon Islands, New Caledonia, New Zealand, Norfolk Island.

Regional Distribution: This species breeds at Khoton, Tolbo, Dayan, Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, and Torkholig Rivers (Northern Uvs Depression); Tes River valley, Khar-Us, Khar, Khyargas, and Dörgön Lakes and the delta of Khovd River with reed beds (Great Lakes Depression); Zavkhan River with reed beds ; Tamir and Orkhon Rivers; Ögii Lake (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, and Telmen Lakes with reed beds (Tarvagatai-Bulnai Mountains); Shishgid and Dood Lake wetlands (Darkhad Depression); Orkhon, Selenge, and Eg Rivers (Orkhon-Selenge basins), Höh, Bus, Galuut Lakes (Herlen-Ulz valleys), Khalkh, Degee, Nömrög, Azarga Rivers and Buir Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog and Taatsyn Tsagaan Lakes (Valley of the Lakes). The species occurs in most lakes and rivers of Khyangan, Hentii, Hövsgöl, and Khangai Mountain Ranges, Valley of the Lakes, Great Lakes and Uvs Lake Depressions on migration (Berezovskii, 1881; Molleson, 1907; Dorogostaiskii, 1908; Buturlin, 1913; Tkachenko, 1920; Tugarinov, 1928; Kozlova, 1930; Sushkin, 1938; Eregdendagva, 1960; Bold, 1962; Bold, 1969; Skryabin & Sumiya, 1976; Ganbat, 1978; Piechocki *et al.*, 1981; Tungalag, 1983; Erdenebat, 1989;

Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 1,400,000-2,900,000 mature individuals. Global breeding and resident ranges are estimated at 25,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a common breeding visitor. It arrives at breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May to end of August. This species nests on cliffs, islands, reed beds and trees near lakes with abundant fishes (Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a solid structure of sticks, lined with long leaves, grasses or water plants. The male brings most of the material whilst the female builds the nest. The female usually lays 3-4, rarely 5-6 eggs of pale blue colour. Both sexes incubate the eggs for 28-29 days. Young are tended by both adults. In very hot weather they may bring water to the chicks. Young remain in the nest for c. 5 weeks but can leave and return when younger. They are fledged at 50-60 days, but take 11-12 weeks to become independent. Young regurgitate food if alarmed. On 28 July, nests containing downy chicks were found in Hövsgöl. One nest was recorded with 3 well-incubated eggs. The estimate of daily food for a single bird in Hövsgöl Lake was 700 g to 2 kg fishes (Sumiya & Skryabin, 1989). Both adults and young feed chiefly on small and medium-sized fishes, as well as young frogs and insects. They leave their breeding site for wintering grounds by mid-September -early October, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (inland) (5.1., 5.5., 5.6., 5.9., 5.13., 5.14., 5.15.); 12. Artificial – Aquatic (12.1., 12.2., 12.3., 12.6., 12.9.).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic /livestock have been grazing and destroying reed beds near freshwater lakes and pools. The overgrazing by livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected breeding success, and river and lakes' water contaminated by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water / ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults/-1.4.6. Dams /two major hydroelectric dams (Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River) led to a drought of Zavkhan River, Airag, and Zost Lakes and beds of *Phragmites* spp., causing mass mortalities of fishes. This may already have begun to affect piscivorous birds, with numbers of Great Cormorants estimated at less than 3,000 birds during this survey in comparison to a count of over 11,000 in 2006 (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010)/, 1.7. Fires /forest and steppe fires may burn breeding habitats near lakes and rivers/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1 Subsistence use or local trade /several species of birds, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch-4.1.1. Fisheries related-4.1.1.3. Entanglement /illegal fishing activities were observed at Buir, Ögii and Khar Lakes. The widespread use of illegal gill nets presents a direct hazard to the species/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1. Local people who live near freshwater lakes such as Buir and Hövsgöl Lakes shoot Cormorants due to competition for fish resources (S.Gombobaatar pers. comm.), 4.2 Collision -4.2.1 Pylon and building collision /collision and electrocution are potential threats to this species all over Mongolia during the autumn and spring migrations (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 6. Pollution (affecting habitat and species)-6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /ponds, islands of saline and freshwater lakes with reed beds drying out/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the flightless chicks and moulting individuals at night/, 8.5. Pathogens or parasites /it is a host of parasitic worms, like *Diffilobothrium* (Pronin & Sumiya, 1974; Pronin, 1976). Highly pathogenic avian

influenza/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting this species/, 10.5. Fire /see 1.7/.

Conservation Measures: Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

75. Scientific Name: *Falco naumanni*

Species Authority: Fleischer, 1818

Common Names: Lesser Kestrel (English), Zeerd shonkhor (Mongolian)

Global Status: Vulnerable, A2bce+3bce

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and human disturbance, and accidental mortality through electrocution, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Mauritania, Gambia, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Germany, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Chad, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Sudan, Zambia, Ukraine, Bulgaria, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Palestinian Territory Occupied, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Myanmar, Japan. This species is regionally extinct in the Czech Republic, Lao People's Democratic Republic, and Slovakia. Its presence and origin are uncertain in Bangladesh, Kyrgyzstan, Slovenia, Tajikistan.

Regional Distribution: This species nests in crevices, holes, and narrow channels of rocks, cliffs, boulders and man-made substrates such as cattle shelters, abandoned buildings and nests of other birds like crow, magpie, rarely Northern Raven, Black Kite (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). It breeds in Achit and Uureg Lakes (Mongol-Altai Mountain Range); Chono KharaiKh River (two pairs nesting in June 1974, 1975 and June, 1978) (Piechocki *et al.*, 1981; BirdLife International, 2001); Khar-Us Lake (one pair on cliffs west of the lake in May 1995) (A. Bräunlich in litt. 2000; BirdLife International, 2001) in the Great Lakes Depression; to the upper Bulgan River (Piechocki *et al.*, 1981); and Mönh Khairkhan massif (less than 2,700 m asl); Uvs Lake depression; from Darkhad Depression and Hövsgöl Mountain Range to Khangai Mountain Range; Khan Höhii through Orkhon, Selenge River basins; Bor Lake of western Hentii Mountains (c.25 pairs nesting in June 1965) (Kleinstäuber & Succow, 1978); Terelj, Turtle Rock (a breeding pair in 1984, 1985 and 1987) (Kerr-Smiley, 1997-1998); to valleys of Onon and Ulz Rivers including Ugtam Nature Reserve

(10 breeding birds in June, 1998) (A. Bräunlich in litt. 2000; BirdLife International, 2001); Middle Khalkh Steppe; Aj Bogd Mountain (a male and two females collected at a small breeding colony in May 1962) (Piechocki 1968); Ih Bogd, Arts Bogd, Gurvansaikhan Mountains (Piechocki, 1968; Mauersberger, 1979); Hurh uul (up to 2,000 m asl) (Gobi-Altai); from Baruunkhurai through Dalanzadgad airport (8 breeding birds in July, 1998) (Dubois & Moutou 1998); Tsetsii Mountain (pair collected at a small breeding colony in May, 1962) (Piechocki 1968) to Eastern Gobi and Northern Gobi; Valley of the Lakes; Desert steppe depression in Zavkhan south to Shargyn Gobi; Trans-Altai Gobi. It migrates through the breeding areas and most suitable habitats for perching, hunting, resting, and roosting in the mountains, steppe, Gobi Desert (Kozlova, 1930; Sushkin, 1938; Baumgart, 1978; Shagdarsuren, 1964&1983; Piechocki, 1968; Bold, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Kurochkin & Michailov, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Stenzel *et al.*, 2004; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). M. Stubbe and his field team found active breeding pairs in the Gobi Desert. Their records were as follows: 4 chicks at Doloony Khooloi, Tsogt-Ovoo, Ömnögobi province /44°24'N; 105°21'E/ on 30 June, 2004; a nest with two breeding pairs at Gurvansaikhan, Ömnögobi province /44°24'N; 105°21'E/ on 28 May, 1962; a nest with two chicks at Baruun Khailaastai, SE Tsogt-Ovoo, Ömnögobi province /44°19'N; 105°21'E/ on 7 March, 2007; two nests with 4 chicks and 6 chicks in Poplar tree at dry river bed of Shutegiin Bayangol, 70 km E Manlai, Ömnögobi province /43°54'N; 107°43'E/ on 21 July, 2004; two nests with 2 chicks and 1 chick in Elm tree at dry river bed of Shutegiin Bayangol, 70 km E Manlai, Ömnögobi province /43°54'N; 107°43'E/ on 21 July, 2005; three nests with 3 chicks, 4 chicks and 3 chicks in Elm tree at Shutegiin Bayangol, Ömnögobi province /43°54'N; 107°35-43'E/ on 02-03 August, 2009; a nest with 5 eggs in Elm trees at Ööshiin Gobi, Ömnögobi province /48°08'N; 108°03'E/ on 20 July, 2004; one pair copulating at Gurvansaikhan Mountain, Ömnögobi province on 16 May, 1976; a nest with 4 eggs, three nests with 3 chicks, six nests with 4 chicks, and one nest chicks fledged at dry river bed of Elm tree, 15 km SE Khanbogd sum, Ömnögobi province /43°08'N; 107°18-24'E/ on 14 July, 2004; three nests with 1 chick; three nests with 2 chicks, and a nest with 5 chicks in Elm trees at Galbyn Gobi of Ömnögobi province /43°08-11'N; 107°15-23'E/ on 17-18 July, 2005; a nest with fledged chicks in Elm tree at Ööshiin Gobi, Ömnögobi province /43°39'N; 108°10'E/ on 19 July, 2004; two nests with 2 chicks in Elm tree at Ööshiin Gobi, Ömnögobi province /43°11'N; 108°59'E/ on 23 July, 2005; a nest with 3 chicks, a nest with 5 chicks, and a nest with 4 chicks in Elm trees Khatanbulag sum, Ömnögobi province /43°23-24'N; 109°32-35'E/ undated; a nest with 4 eggs, a nest with 2 fledged chicks, five nests with 3 chicks, 4 nests with 4 chicks, 4 nests with 5 chicks in Elm trees at Bag mod, SE Noyon sum, Ömnögobi province /42°50'N; 102°38-44'E/ on 07-08 July, 2007; a nest with 5 chicks in Elm tree at 50 km SE Nomgon sum, Ömnögobi province /42°40'N; 105°41'E/ on 08 July, 2004; a nest with 7 eggs, a nest with 3 chicks, three nests with 4 chicks, and two nests with 5 chicks in Elm tree at 45 km S Bayan-Ovoo sum, Ömnögobi province /42°34-38'N; 105°40-52'E/ on 09 July, 2004; two nests with 4 chicks, a nest with 5 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°35-40'N; 105°40-57'E/ on 11-12 July, 2005; a nest with 3 chicks, two nests with 4 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°35-40'N; 105°41-57'E/ on 26 July, 2006; a nest with 3 chicks, two nests with 5 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°34-40'N; 105°41-57'E/ on 12 July, 2007; a nest with 1 chick, a nest with 2 chicks, one nest with one chick and 4 eggs, and one nest with 4 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°37-42'N; 105°41-52'E/ on 01 July, 2009; three nests with 4 chicks and a nest with 5 chicks, and 3 nests with fledged chicks in Elm tree at 45-70 km SE Bayan-Ovoo, Ömnögobi province /42°32-40'N; 106°22-47'E/ on 10-11 July, 2004; a nest with 3 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°34'N; 106°21'E/ on 13 July, 2005; a nest with a chick in Elm tree at Galbyn Gobi of Ömnögobi province /42°34'N; 106°47'E/ on 27 July, 2006; a nest with 3 chicks and an infertile egg, one nest with 4 chicks in Elm trees at Galbyn Gobi of Ömnögobi province /42°24-33'N; 106°47'E/ on 3 July, 2009; a nest with fledged chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°49'N; 106°52'E/ on 15 July, 2004; two nests with 2 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°46'N; 107°47'E/ on 19 July, 2005; a nest with a chick in Elm tree at Galbyn Gobi of Ömnögobi province /42°34'N; 106°47'E/ on 27 July, 2006; a nest with 2 chicks in Elm

tree at Galbyn Gobi of Ömnögobi province /42°46'N; 107°47'E/ on 19 July, 2005; a nest with 2 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°49'N; 107°52'E/ on 22 July, 2005; two nests with 3 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°47-49'N; 107°46-52'E/ on 29 July, 2006; a nest with 4 chicks in Elm tree at Galbyn Gobi of Ömnögobi province /42°47'N; 107°47'E/ on 15 July, 2005; a nest with 4 chicks and 1 infertile egg, a nest with 5 well-flying chicks, and a nest with 4 well-flying chicks in Elm trees at Galbyn Gobi of Ömnögobi province /42°42-49'N; 107°47-53'E/ on 05-06 July, 2009; a nest with 5 well-flying chicks in Elm tree at 70 km W Khatanbulag sum, Dornogobi province /42°56'N; 108°21'E/ on 17 July, 2004; a nest with 3 chicks in Elm tree at Borzon Gobi of Ömnögobi province on 29 June, 2009 (Stubbe *et al.*, 2010).

Population: The global population consists of 140,000 mature individuals. Global breeding and resident ranges are estimated at 7,020,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding, summering and migrating individuals arrive in Mongolia by late April-early May. Breeding begins in late June-early July and continues into August. Breeding habitats are open arid areas in forest steppe, mountain steppe, steppe, desert steppe and Gobi Desert. It is a colonial nester. Colony size varies 2-20 pairs. They do not construct own nest. They nest in holes, natural cavities of cliffs and rocks, in large tree holes, in cracks of deserted buildings and man-made substrates including cattle shelters, or in deserted nests of other birds such as Black Kite, Black-billed Magpie, Carrion Crow. The nest is a shallow hollow with no nest material. The female usually lays 4-5 eggs of a non-glossy white, or pale buff with yellowish-red, red, or reddish-brown blotches and spots. Mostly female incubates the eggs for 28 days. The female broods the young, and the male brings food to the female and chicks. The young can fly at 26-28 days. They remain with the parents for some time after this. Both adults and young feed on insects (grasshoppers, crickets, beetles), amphibians such as Siberian Wood Frog (*Rana amurensis*), young small Mongolian Toad (*Bufo raddei*), reptiles such as Mongolian Racerunner (*Eremias argus*), Toad-headed Agama (*Phrynocephalus versicolor*), also small birds (larks, pipits, finches), and rodents (young vole, gerbil, hamster), often taken on the ground. It forms flocks of 4-120 individuals, perching on wires and poles of high power electric lines, trees in forest steppe and Gobi Desert. Breeding and migrating birds leave Mongolia for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. with rocky mountain); 6. Rocky areas; 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5.).

Dominant Threats: 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought. The habitat drought leads to a crash of prey species like voles and insects.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species. Some breeding pairs desert their nest site with eggs.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near the area where the species breeds are major threats, causing the species to abandon the site.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1. By-catch-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: Local people trap Common Kestrel instead of Saker Falcon for sale due to confusion with Saker Falcon.

4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Electrocuted and collided birds are regularly found

underneath 10, 15, 35 and 100 KV and other types of high power electric lines in Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.2. Storms or flooding-7.3. Temperature extremes: In early spring, eggs and downy young chicks overcool from coldness, heavy rain and strong storms. Some nests with eggs and chicks on poles, roofs of buildings, and towers have been blown away.

8. Changes in native species dynamics-8.1. Competitors: Neighbouring nest competitors like Saker Falcon, Upland Buzzard, Golden Eagle and Steppe Eagle threaten breeding pairs during the breeding season.

8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. Eurasian Eagle-owls, Golden and Steppe Eagles prey upon both adults and chicks.

8.3. Prey or food base: Crash of Brandt's Vole number affects the breeding success.

8.5. Pathogens or parasites: Avian influenza is a potential threat to the species. Lack of food leads the breeding birds to eat own chicks and larger chicks to take smaller.

10. Human disturbance-10.1. Recreation and tourism: Breeding pairs have been disappearing from historical breeding sites due to construction of tourist camps near the sites.

10.4. Transport: Transport of cars near tourist camps and busy roads have been negatively affecting the individuals that nest near the roads. Every April and May, electricity companies remove all nests on poles. Field workers throw all nests with eggs and chicks away.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

76. Scientific Name: *Falco tinnunculus*

Species Authority: Linnaeus, 1758

Common Names: Common Kestrel or Eurasian Kestrel (English), Nachin shonkhor (Mongolian)

Subspecies in Mongolia: *F. t. tinnunculus* (see Howard & Moore (1994); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Virgin Islands, U.S., Virgin Islands, British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, French Guiana, Bermuda,

Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands.

Regional Distribution: This species breeds in all areas in Mongolia, excluding wetlands, taiga, dense forest, and high mountains exceeding 3,500 m asl, unsuitable nesting areas in the Gobi Desert and steppe, and river valleys (Buturlin, 1913; Kozlova, 1930 & 1932; Shagdarsuren, 1964; Piechocki, 1968; Bold, 1969; Bold, 1973; Kleinstäuber & Succow, 1978; Mauersberger, 1979; Piechocki *et al.*, 1981; Shagdarsuren, 1983; Stephan, 1988; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 5,000,000 mature individuals. Global breeding and resident ranges are estimated at 51,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and partial migrant. Migrants arrive in the breeding sites by late April-early May, depending on weather conditions at breeding and wintering grounds. Breeding begins in late May-early June. This species nests in crevices, holes, and narrow channels of rocks, cliffs, boulders and man-made substrates such as cattle shelters and abandoned buildings, or in nests of other birds such as Carrion Crow, Black-billed Magpie, rarely Northern Raven, and Black Kite (Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The female lays 4-5, occasionally 8-9 eggs of a non-glossy, white or yellowish buff colour with reddish-brown, purple, greyish brown blotches, and markings. Both sexes incubate the eggs for 27-30 days. The male hunts for small voles, grasshoppers, crickets, and young fledglings of small passerines. The male feeds the female and chicks in the nest. The young fly at 27-40 days, and remain with the parents, dependent on them for several weeks afterwards. On migration, individuals occur singly or in small flocks of 6-15 individuals hunting for insects and young voles from taiga forest to Desert steppe. First winter birds and some adults leave the breeding site for wintering grounds by late early September to late September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. with rocky mountain); 6. Rocky areas; 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5.).

Dominant Threats: 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought. The habitat drought leads to a crash of prey species like voles and insects;

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species. Some breeding pairs desert their nest site with eggs.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of

trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near the area where the species breeds are major threats, causing the species to abandon the site.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1. By-catch-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: Local people trap Common Kestrel instead of Saker Falcon for sale due to confusion with Saker Falcon.

4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Electrocuted and collided birds are regularly found underneath 10, 15, 35 and 100 KV and other types of high power electric lines in Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters- 7.2. Storms or flooding-7.3. Temperature extremes: In early spring, eggs and downy young chicks overcool from coldness, heavy rain and strong storms. Some nests with eggs and chicks on poles, roofs of buildings, and towers blown away.

8. Changes in native species dynamics -8.1. Competitors: Neighbouring nest competitors like Saker Falcon, Upland Buzzard, Golden Eagle and Steppe Eagle threaten breeding pairs during the breeding season.

8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. Eurasian Eagle-owls, Golden and Steppe Eagles prey upon both adults and chicks.

8.3. Prey or food base: Crash of Brandt's Vole number affects the breeding success.

8.5. Pathogens or parasites: Avian influenza is a potential threat to the species. Lack of food leads the breeding birds to eat own chicks and larger chicks to take smaller.

10. Human disturbance-10.1. Recreation and tourism: Breeding pairs have been disappearing from historical breeding sites due to construction of tourist camps near the sites.

10.4. Transport: Transport of cars near tourist camps and busy roads have been negatively affecting the individuals that nest near the roads. In April and May, electricity companies remove all nests on poles. Field workers throw away all nests with eggs and chicks.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

77. Scientific Name: *Falco vespertinus*

Species Authority: Linnaeus, 1766

Common Names: Red-footed Falcon or Western Red-footed Falcon (English), Turamtai shonkhor (Mongolian)

Global Status: Near Threatened

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Mauritania, Gambia, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Tajikistan, Kyrgyzstan.

Regional Distribution: In Mongolia, this species has been recorded at Hudriin Davaa, North-Western Hentii, Hustai Nuruu National Park and Khalkh River basin (Kozlova, 1930; Piechocki *et al.*, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; MNE & JICA, 2011; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Stubbe *et al.*, 2010). However, historical records were doubtful due to the complex taxonomy of the species and the belief that Amur Falcon was a subspecies of the Red-footed Falcon. Recent records have not been proofed with photographs and other documentation for the country.

Population: The global population consists of 300,000 - 800,000 mature individuals. Global breeding and resident ranges are estimated at 10,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There are a few doubtful records in Mongolia due to misidentifications by birders and some researchers. Up to the date, there is no proper documentation the species in Mongolia. Vagrants possibly migrate through the W & NW, possibly central Mongolia. According to Ferguson-Lees & Christie (2001), the species breeds in open lowlands with trees and plenty of insects, on which it feeds, including steppe and forest-steppe, open woodland, and pastureland with tall hedgerows or fringing trees, boggy areas and taiga edge. It is usually colonial, breeding in disused nests of other birds (most commonly *C. frugilegus*), but can also be solitary. The Red-footed Falcon's main prey is large insects, but it will also take small mammals and birds.

Habitat Type: Potential habitat is 1. Forest (1.4.).

Dominant treats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3.3. Wood- 1.3.3.1. Small scale subsistence, 1.3.3.2. Selective logging, 1.3.3.3. Clear-cutting, 1.4. Infrastructure development-1.4.2. Human settlement, 1.4.3. Tourism and recreation, 1.7. Fires; 4. Accidental mortality -4.1.2. Terrestrial-4.1.2.3. Poisoning; 5. Persecution -5.1. Pest control; 6. Pollution -6.2. Land pollution -6.2.2. Domestic; 7. Natural disasters -7.2. Storms or flooding, 7.3. Temperature extremes; 8. Changes in native species dynamics -8.1. Competitors, 8.3. Prey or food base; 10. Human disturbance -10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Listed in CITES Appendix II. The species passes through protected areas (possibly Hustai Nuruu National Park) and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

78. Scientific Name: *Falco amurensis*

Species Authority: Radde, 1863

Common Names: Amur Falcon or Eastern Red-footed Falcon (English), Amryn shonkhor or amryn turamtai shonkhor (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by mining and human disturbance through logging, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Saint Helena, Italy, the Democratic Republic of the Congo, Angola, Namibia, South Africa, Botswana, Zambia, Zimbabwe, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Malawi, Ethiopia, Kenya, Somalia, Yemen, Oman, Seychelles, Afghanistan, Pakistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands.

Regional Distribution: This species breeds from lower Delgermörön, Ider, and Chuluut Rivers to the upper Ulz River; North Khangai east to Tuul River valley, upper Herlen and Onon Rivers; from Hövsgöl to Uur and Eg Rivers; Orkhon, Selenge, Yeröö, Kharaa River valleys; lower Balj and Onon River valleys; more than 40 breeding pairs in poplar and birch trees along Khalkh River at 5 km east of Sumber sum, Dornod province on 20 July, 2009 (S. Gombobaatar pers. comm. and photographs) (Khalkh River and Khyangan region). (Kozlova, 1930; Shagdarsuren, 1964 & 1965; Bold, 1973; Kleinstäuber & Succow, 1978; Sumiya & Skryabin, 1989, Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tsevenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Schäfer, 2003; Schäfer *et al.*, 2004; Stenzel *et al.*, 2004; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). It migrates through the breeding areas and Middle Khalkh Steppe and the Northern Gobi. O.Shagdarsuren (1963) found 18 breeding pairs in elm and poplar trees at Toodog Khudag, Arvan Naiman Bogd Mountain of Mandal sum, Dornogobi province (Shagdarsuren, 1963 & 1984). M.Stubbe and his field members found breeding birds in the Gobi Desert. Records follow as; a breeding record in Elm tree nest at Zuun Khailaast, 15 km SE of Tsogt-Ovoo sum, Ömnögobi province /44°19' N; 105°29'E/ on 01 July, 2004; two breeding pairs with 4 eggs and 5 chicks in Elm tree nests at Shuteenii Bayangol, Tsogt-Ovoo sum, Ömnögobi province in June, 1962; two nests with 4 eggs and 5 chicks in Elm tree at Galbyn Gobi, 26 km SE Khanbogd sum, Ömnögovi province /43°05' N; 107°29'E/ on 14 July, 2004; two nests with 4 chicks, and 2 eggs and one chick in Elm trees at Galbyn Gobi of Ömnögobi province /43°11'N; 107°17'E/ on 17 July, 2005; 2 nests with 3 chicks, two nests with 4 chicks, and a nest with 1 egg in Elm trees at Galbyn Gobi of Ömnögobi province /43°36-44'N; 106°55-59'E/ on 14-16 July, 2005; a breeding record in Magpie old nest in Elm tree at Galbyn Gobi of Ömnögobi province /42°47'N; 107°46'E/ on 19 July, 2005; a nest with 4 eggs, 2 nests with 3 chicks, a nest with 4 chicks, and 2 nests with 5 chicks in Magpie old nest in Elm tree at Galbyn Gobi of Ömnögobi province /42°56-58'N; 108°02-22'E/ on 16-19 July, 2004; two nests with 3 chicks and

a nest with one chick in Elm tree at Galbyn Gobi of Ömnögobi province /42°42-58'N; 108°06-19'E/ on 21-22 July, 2004; a breeding pair's nest in Elm tree at Galbyn Gobi of Ömnögobi province /42°59'N; 108°19'E/on 06 July, 2009; 4 nests with 4 eggs, 5 eggs, 3 chicks and 6 chicks in Elm trees at Khatanbulag sum, Dornogobi province /43°22-24'N; 109°30-34'E/ on 7-8 July, 2009 (Stubbe *et al.*, 2010).

Population: The global population consists of 1,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding pairs arrive in the breeding sites by mid May–late May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from June to August. Breeding pairs nest in deserted or newly built nests of Magpie, Carrion Crow, Daurian Jackdaw, and occasionally Black Kite, Upland Buzzard in willow, pine, larch, poplar, elm and birch trees in forest, forest steppe, forested river valleys and patchy forest in the steppe (Shagdarsuren, 1964 & 1983; Schäfer, 2003; Schäfer *et al.*, 2004; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) and trees in the Gobi Desert (*Ulmus* sp. and *populus* sp.) (Shagdarsuren, 1963&1984). Female lays 2-6, rarely 7 eggs of a non-glossy white or pale buffish with reddish-brown blotches, spots and other markings (Schäfer, 2003; Schäfer *et al.*, 2004; Stubbe *et al.*, 2010). Mostly males hunt voles, grasshoppers, lizards in the Gobi Desert (Shagdarsuren, 1963 & 1984), crickets, young fledglings of small passerines (Horned Lark, Sky Lark, Short-toed Larks, Blyth's Pipit), young voles, dragonflies, Siberian Wood Frog (*Rana amurensis*), young small Mongolian Toad (*Bufo raddei*), Far Eastern Tree Frog (*Hyla japonica*) and different species of grasshoppers. Chicks leave the nest at 27-29 days. When the chicks are large enough they climb and sit on branches near the nest. From this time, both birds feed the nestlings. After the breeding season, both adults and young birds perch on wires, trees and poles in open areas and hunt small voles and large insects. On migration, individuals occur, or in groups of 4-30 individuals in open steppe areas and lake and river valleys. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 4. Grassland (4.4. on migration); 5. Wetlands (inland) (5.1., 5.5. surrounded by forest); 8. Desert (8.2.); 11. Artificial – Terrestrial (11.3., 11.4. (on migration)).

Dominant treats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought. The habitat drought leads to a crash of prey species like frogs, toads, small passerines in forest steppe and river valleys.

1.3. Extraction-1.3.1. Mining: Direct and indirect impacts from gold and other mining activities to the species are serious.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near the area where the species breeds are major threats, causing the species to abandon the site. Number of breeding pairs at Bogd Khan Protected Areas has swiftly decreased over the last few years due to tourism activities and construction.

1.7. Fires: Forest fires may burn trees with nests, eggs and occasionally young hatchlings.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide against Siberian Moth in forests and forest steppe, are a cause of individual poisoning and low breeding success in breeding and non-breeding areas.

4.2. Collision -4.2.1. Pylon and building collision: This is a potential threat to the species.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters- 7.2. Storms or flooding-7.3. Temperature extremes: Eggs and downy young chicks overcool from coldness, heavy rain and strong storms.

8. Changes in native species dynamics- 8.1. Competitors: Neighbouring nest competitors like Magpie, Carrion Crow, and Hobby threaten breeding pairs during the breeding season.

8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

10. Human disturbance-10.1. Recreation and tourism-10.4. Transport: Transport of cars near busy roads, and tourist camps has negatively affected the individuals that nest near the roads.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 7.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

79. Scientific Name: *Falco columbarius*

Species Authority: Linnaeus, 1758

Common Names: Merlin (English), Khainguuna shonkhor (Mongolian)

Subspecies in Mongolia: *F. c. insignis* at Khatgal, Hövsgöl Lake area (Kozlova, 1932; Sumiya & Skryabin, 1989), *F. c. aesalon* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and human disturbance through logging, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Haiti, Bahamas, Brazil, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S, Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Syrian Arab Republic, Iraq, Armenia, Islamic Republic

of Iran, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Lao People's Democratic Republic, Viet Nam, Japan, Democratic People's Republic of Korea, Republic of Korea. This species is considered vagrant in Senegal, Liechtenstein, Svalbard and Jan Mayen, Malta, Sudan, Lebanon, Yemen, Bahrain, Kuwait, Oman, Bhutan, Thailand, Philippines.

Regional Distribution: This species breeds at Siilhem, Kharkhiraa and Turgen Mountains; from Khovd River valleys to Uyench River; Sagsai sum, Bayan-Ölgii province (4 eggs in old Magpie nest on 12 June, 2001) (S. Gombobaatar pers. comm.; Stubbe *et al.*, 2010); Bayantes sum, Tes River with coniferous and deciduous forests (a breeding pair on 02 July, 1968); from Sevsuul, W Hövsgöl (breeding male was seen on 11 June, 1980) (Sumiya & Skryabin, 1989) region to Salkhit Ganga at Khangai (3 eggs on 14 June, 1964) (Piechocki, 1968; Stubbe *et al.*, 2010); breeding record at 10 km north of Khujirt, Övörkhangaï province (Mauersberger, 1979; Stubbe *et al.*, 2010) from Bulnai and Tarvagatai to the upper and middle of Herlen River and Högnökhaan Mountain (Eastern Khangai). It migrates through the breeding areas and at the Middle Khalkh Steppe, Northern Gobi, Mongol Daguur Steppe, Khalkh Gol River basin (Kozlova, 1930 & 1932; Sushkin, 1938; Shagdarsuren, 1964; Bold, 1969; Bold, 1973; Shagdarsuren, 1983; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). P.Gankhuyag found two nests of Carrion Crow occupied by a Merlin pair in a willow tree near Herlen River, Mönгönmorit sum, Төв province (48.17004°N; 108.64007°E) on 07 June, 2010. There were 4 eggs, incubated by the male of the pair. The second nest was placed in a poplar tree about 3 km away from the first nest (48.09814°N; 106.63361°E) (P.Gankhuyag pers. comm.).

Population: The global population consists of 1,300,000 mature individuals. Global breeding and resident ranges are estimated at 26,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and wintering species. Most breeding and summering individuals arrive in breeding and summering sites by late April-early May. Breeding begins in late May-early June. They prefer to nest in abandoned nests of Black-billed Magpie, Carrion Crow, and Daurian Jackdaw in trees, occasionally cliffs and rarely Eurasian Sparrowhawk nests in forest, forest steppe, and river valleys (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The female usually lays 3-4, sometimes 2-7 eggs of a non-glossy, pale buff colour, usually obscured by a heavy sprinkling of red, purplish-red or brown. Both female and male incubate the eggs for 28-32 days. The male hunts for small birds and rodents, rarely large flying insects and small lizards. Most young and adult birds leave the breeding site for wintering grounds by early September –late September, depending on food availability and weather conditions. On migration individuals feed on small birds and voles in open steppe and lake and river valleys. Some birds were singly found in a Brandt's Vole (*Lasiopodomys brandti*) colony of the Middle Khalkh Steppe in December, 1998, November, 2006 and Khovd River valley in February, 2011 (S.Gombobaatar pers. comm. and photographs).

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (inland) (5.1., 5.5. surrounded by forest); 6. Rocky areas (on migration), 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.2. on migration), 11.3., 11.4. (on migration).

Dominant treats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in the steppe breeding habitats of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected to the species/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats. Fires may burn nests with eggs and occasionally young/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public

service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning/, 4.2. Collision -4.2.1. Pylon and building collision /collided birds were found under a pole of the 15 KV power line in Central Mongolia. This species is one of the most commonly electrocuted birds on 15 KV lines/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/ 6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of the seed-eating birds and rodents that are the main prey of the species/, 7.3. Temperature extremes /overcooling of eggs and young chicks in the nest during early breeding period/; 8. Changes in native species dynamics-8.2. Predators and 8.3. Prey or food base /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

80. Scientific Name: *Falco subbuteo*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Hobby, Hobby or Northern Hobby (English), Shuuman shonkhor (Mongolian)

Subspecies in Mongolia: *F. s. subbuteo* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Iceland, Senegal, Mauritania, Gambia, Guinea, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Republic of, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan,

Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan, It is regionally extinct in Cyprus.

Regional Distribution: This species breeds at Achit, Uureg Lake valleys (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); coniferous and deciduous forests (Tes River valley); lower Khovd River (Great Lakes Depression); from Bulgan River valley (Dzungariin Gobi) to Eastern Gobi, Tarvagatai-Bulnai Mountains (Khangai Mountain Range), Hövsgöl Mountain Range and Darkhad Depression, upper Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen Rivers (Hentii Mountain Range), upper Ulz, lower Onon, Balj, Herlen River valleys, Buir Lake-Khalkh River-Khyangan region excluding high mountains, taiga, dense forest, wetlands, plains, and human settlement. It migrates through the breeding areas and Gobi Desert (Kozlova, 1930; Shagdarsuren, 1964&1983; Piechocki, 1968; Kleinstäuber & Succow, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003 Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). Breeding records in the Gobi Desert are followings; 2 chicks and 1 egg in Elm tree nest at Doloony Khooloi at Tsogt-Ovoo sum of Ömnögobi province /44°23' N; 105°21'E/ on 21 July, 2006; 4 chicks in Elm tree nest at Shutegiin Bayangol, Manlai sum, Ömnögobi province /44°55' N; 107°35'E/ on 21 July, 2004; 3 chicks in Elm tree nest at Shutegiin Bayangol, Manlai sum, Ömnögobi province /44°45' N; 107°36'E/ on 03 August, 2009; 4 chicks in Elm tree nest at Ööshiin Gobi, Ömnögobi province /43°42' N; 108°10'E/ on 19 and 23 July, 2005; 3 eggs in Elm tree nest at Galbyn Gobi at Khanbogd sum of Ömnögobi province /43°08' N; 107°22'E/ on 17 July, 2004; 3 chicks in Elm tree nest at Galbyn Gobi, Khanbogd sum, Ömnögobi province /43°08' N; 107°19'E/ on 17 July, 2004; a chick and 3 eggs in Elm tree nest at Galbyn Gobi, Khanbogd sum, Ömnögobi province /43°10' N; 107°16'E/ on 17 July, 2005; a chick and 3 eggs in Elm tree nest at Galbyn Gobi, Khanbogd sum, Ömnögobi province /43°08' N; 107°20'E/ on 17 July, 2005; 2 chicks and one infertile egg in Elm tree nest at Galbyn Gobi, Khanbogd sum, Ömnögobi province /42°35' N; 105°47'E/ on 12 July, 2005; 2 pairs with 4 eggs, a pair with 3 eggs, and one pair with 3 chicks in Elm tree nests at Galbyn Gobi, Khanbogd sum, Ömnögobi province /42°21-34' N; 106°38-47'E/ on 10-12 July, 2004; 3 chicks in Elm tree nest at Galbyn Gobi, Khanbogd sum, Ömnögobi province /42°34' N; 106°57'E/ 28 July, 2006; one pair with three eggs, one pair with 2 chicks, and one pair with one egg in Elm tree nests at 71-82 km SE Khanbogd sum, Ömnögobi province /42°41' N; 107°59'E; 42°43' N; 107°58'E; 42°48' N; 107°46'E/ on 12 July, 2005; one pair with one chick and two eggs in Elm tree nest at Khanbogd sum, Ömnögobi province /42°49' N; 107°59'E/ on 16 July, 2004; a pair with two chicks and two eggs in Elm tree nest at Khanbogd sum, Ömnögobi province /42°46' N; 107°46'E/ on 16 July, 2004; one pair with 3 chicks in Elm tree nest at Khanbogd sum, Ömnögobi province /42°55' N; 108°23'E/ on 17 July, 2004; 3 chicks in Elm tree nest at Bad mod, SE Noyon sum, Ömnögobi province /42°52' N; 102°35'E/ on 7 July, 2007; 4 eggs in Elm tree nest at Borzon Gobi of Ömnögobi province /42°33' N; 105°11'E/ on 1 July, 2002; one egg in Elm tree nest at Borzon Gobi of Ömnögobi province /42°35' N; 105°28'E/ on 10 July, 2005; 3 chicks in Elm tree nest at Borzon Gobi of Ömnögobi province /42°31' N; 105°13'E/ on 24 July, 2006; 2 eggs in Elm tree nest at Borzon Gobi of Ömnögobi province /42°27' N; 105°21'E/ on 10 July, 2007 (Stubbe *et al.*, 2010).

Population: The global population consists of 400,000 mature individuals. Global breeding and resident ranges are estimated at 29,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a common breeding visitor. Migrants arrive in breeding sites by mid-April – late May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from June to August. Breeding pairs do not build own nest. They prefer to select the deserted nests of Black-billed Magpie, Carrion Crow, Daurian Jackdaw, and occasionally Black Kite in trees in forest, forest steppe and forested river valleys (Shagdarsuren, 1964&1983; Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Gombobaatar, 2012). The female lays 2-4 eggs of a non-glossy, yellowish brown densely speckled with fine reddish-brown. Mostly the female (rarely the male) incubates the eggs for 28 days. The male hunts for small rodents, passerines such as pipits, larks, wagtails,

skylarks, young Japanese quails, lizards, rarely amphibians and insects including grasshoppers and dragonflies. The male brings the prey on talon and passes them to the female and nestlings near/in the nest. Later or when chicks are large enough to stay in the nest, both female and male hunt. Young birds and adults perch on wires and tops of trees to hunt insects on the ground or in the air. On migration, they occur singly or in very loose groups of 3-4 individuals and hunt passerines and voles in open steppe, and mountain steppe. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (inland) (5.1., 5.5. surrounded by forest); 6. Rocky areas (on migration), 8. Desert (8.2.); 11. Artificial – Terrestrial (11.2. on migration), 11.3., 11.4. (on migration).

Dominant treats: 1. Habitat Loss and Degradation(human-induced) -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought. The habitat drought leads to a crash of prey species like passerines in forest steppe, rodents and insects.

1.3. Extraction-1.3.1. Mining: Direct and indirect impacts from gold and other mining activities to the species are sometimes serious. Some breeding pairs desert their nest site with eggs.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near the area where the species breeds are major threats, causing the species to abandon the site.

1.7. Fires: Forest fires may burn trees with nests, eggs and occasionally young hatchlings.

3. Harvesting (hunting or gathering) -3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places. In autumn trapping season, local people trap Hobby for a sell to Arab falconers because they confused with Saker Falcons.

4. Accidental mortality -4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide against Siberian Moth in forests and forest steppe, are a cause of individual poisoning and low breeding success in breeding and non-breeding areas.

4.2. Collision -4.2.1. Pylon and building collision: This is a potential threat to the species.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)

6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters- 7.2. Storms or flooding-7.3. Temperature extremes: In early spring, eggs and downy young chicks overcool from coldness, heavy rain and strong storms.

8. Changes in native species dynamics -8.1. Competitors: Neighbouring nest competitors like Magpie, Carrion Crow, and Amur falcons threaten breeding pairs during the breeding season.

8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

8.3. Prey or food base: Crash of prey species in a sudden year affects the breeding success.

8.5. Pathogens or parasites: Avian influenza is a potential threat to the species. Lack of food leads the breeding birds to eat own chicks and larger chicks to take smaller.

10. Human disturbance- 10.1. Recreation and tourism- 10.4. Transport: Transport of cars near busy roads, and tourist camps has negatively affected individuals that nest near roads.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

81. Scientific Name: *Falco cherrug*

Species Authority: Gray, 1834

Common Names: Saker Falcon (English), Idleg shonkhor (Mongolian)

Subspecies in Mongolia: *F. c. milvipes* (see Howard & Moore (1994); Ferguson-Lees & Christie (2001); Gombobaatar (2006) for further details).

Taxonomical Notes: This is a polymorphic species consisting of individuals differing in plumage, body size and shape, geographical and ecological characters. Altai Falcon (*Falco altaicus*, *Falco cherrug altaicus*, *Falco rusticolus altaicus*) is possibly a relict hybrid population between Saker Falcon and Gyr Falcon inhabiting the Altai mountain range. General appearance of the Saker Falcon is very similar to Gyr Falcon. Hybrid individuals with dominant Saker characters and weak Gyr Falcon features breed successfully with typical *milvipes* Sakers in Mongolia. Also, there are dark brown or chocolate brown individuals of Sakers similar to the hybrid falcon in the steppe of the country (Gombobaatar, 2006).

Global Status: Vulnerable

Regional Status: Vulnerable A2(acd); C.

Rationale for Assessment: This species has been assessed as Vulnerable because the number of mature individuals in Mongolia is undergoing a continuing decline and the regional population is estimated at less than 10,000 mature individuals. This decline is primarily due to the illegal and legal trade in the species, poisoning, electrocution, human disturbance and habitat loss and degradation. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Mauritania, Morocco, Mali, Spain, France, Germany, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Chad, Poland, Malta, Croatia, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Korea, Republic of, Romania, Finland, Sudan, Ukraine, Bulgaria, Belarus, Egypt, Turkey, Moldova, Republic of, Russian Federation, Burundi, Tanzania, United Republic of, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, It is regionally extinct in Turkmenistan.

Regional Distribution: This falcon was documented in the *Secret History of the Mongols* (Gadamba, 1990). Saker Falcon may have been used for falconry by Khubilai Khan in 1272-1289 (Mark Polo, 1987). This species breeds in high mountains (up to 3,500 m asl), forest steppe, mountain steppe, steppe, desert steppe, Gobi Desert (trees, slopes) at Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression (surrounding mountains), Depression of Zavkhan River, Khangai, Hövsgöl, Hentii Mountain Range, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Dzungariin Gobi, Trans-Altai Gobi, Northern Gobi, Eastern Gobi Depression. It can be found practically all over Mongolia, excluding wetlands, taiga, deep forest, sand dunes, and areas that lack nesting substrates in the Gobi Desert. It migrates through all of the above-mentioned areas (Przewalskii, 1876; Pevtsov, 1883; Potanin, 1883; Grumm-Grzemailo, 1914; Bianki, 1915; Tugarinov, 1929; Kozlova, 1930; Kozlova, 1932; Tugarinov, 1932; Sushkin, 1938; Tarasov, 1944; Dementiev, 1962; Tarasov, 1960; Shagdarsuren, 1964; Dementiev & Shagdarsuren, 1965; Bold, 1966; Bold, 1969; Bold, 1973; Kozlova, 1975; Ostapenko *et al.*, 1977; Baumgart, 1978; Kleinstäuber & Succow,

1978; Mauersberger, 1979; Mauersberger, 1980 Piechocki *et al.*, 1981; Polyakov, 1912 *et al.*, 1982; Stepanyan & Bold, 1983; Shagdarsuren, 1983; Sergelen, 1986; Bold, 1988; Sumiya & Skryabin, 1989; Bold, 1989; Baumgart, 1991; Popov, 1991; Tsengeg, 1996; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Banzragch *et al.*, 1998; Potapov *et al.*, 1999b; Sumiya & Batsaikhan, 1999; Potapov *et al.*, 2000; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Bold & Boldbaatar, 2001; Ellis, 2001; Boldbaatar, 2003; Potapov *et al.*, 2001b; Shagdarsuren *et al.*, 2001; Boldbaatar, 2002; Sumiya, 2002; Potapov *et al.*, 2002; Bold *et al.*, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Bold, 2005a; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar, 2006&2006a; Tsegmid & Uuganbayar, 2006; Gombobaatar *et al.*, 2007a; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Otgontuya & Gombobaatar, 2010; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). Occurrence, wintering and migration patterns are markedly dependent on the population of prey species (Brandt's Vole, Ground Squirrels, Mongolian Pika and Daurian Pikas (mammals), steppe passerines, Chukar, Pallas's Sandgrouse (Birds) (Gombobaatar *et al.*, 1999; Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Sumiya *et al.*, 2001; Gombobaatar *et al.*, 2002; Potapov *et al.*, 2002; Uuganbayar & Gombobaatar, 2003; Gombobaatar, 2006&2006a; Gombobaatar *et al.*, 2007a; Munkhzaya & Gombobaatar, 2007; Uuganbayar *et al.*, 2010)

Population: The global population consists of 19,200 - 34,000 mature individuals. Global breeding and resident ranges are estimated at 10,300,000 km² (BirdLife International, 2011). In 1999 the population was estimated at 3,000 breeding pairs (Shagdarsuren *et al.*, 2001). However in 2000 the population had dropped to an estimated 2,200 pairs and in 2003 the number of falcons breeding in 6 study sites was less than 50% of previous years, with most sites being unproductive. Population size of the Saker in Mongolia consisted of 186 breeding pairs (6050 individuals) in 2002 (Saker Falcon Census, 2002). From 1998 to 2005, density of breeding pairs was 0.47 on average (min. 0.13, max. 0.97) at five different study areas in central, eastern and western Mongolia (Gombobaatar, 2006).

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this is a breeding visitor and partial migrant. All young birds migrate to N&NW China and some adults stay in Mongolia depending on food availability resource and winter condition (Bold & Boldbaatar, 2001; Potapov *et al.*, 2001; Sumiya *et al.*, 2001; Potapov *et al.*, 2002; Gombobaatar, 2006). By second half of April, most breeding pairs, both female and male actively defend their nest site from other birds and predators. Breeding pairs nest in old and newly built nests of Northern Raven, Upland Buzzard, Steppe Eagle, Golden Eagle, Black Kite, and rarely Cinereous Vulture or Black Stork, placed on cliffs, trees, rock boulders, sandy precipices, electric poles and pylons, roofs of cattle shelters and deserted buildings, or on the ground. Some pairs scrape a hollow in the cliff edge and sandy cliffs (Shagdarsuren, 1964&1983; Baumgart, 1978 & 1978a; Ellis *et al.*, 1995, 2001a; Bold *et al.*, 1996; Tsengeg, 1996; Banzragch *et al.*, 1998; Potapov *et al.*, 1999; Shijirmaa *et al.*, 2000; Bold & Boldbaatar, 2001; Potapov *et al.*, 2001, 2002, 2003; Bold *et al.*, 2005; Gombobaatar, 2006&2006a; Gombobaatar *et al.*, 2007a; Munkhzaya & Gombobaatar, 2007; Gombobaatar *et al.*, 2009; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Height of nesting substrates is 15.8±0.7 m (max. 120, min. 0, N=303) and distance from ground to nest is 10.2±0.4 m (max. 60, min. 0, N=303) on average (Gombobaatar, 2006). Females are larger than males. Though they do not build own nest, they carry nest materials to the nest (Ellis *et al.*, 1997). Some pairs select the same nest site for 4-6 years. After breeding pairs select a nest site, pairs copulate on nesting substrate and the ground. Clutch size varies from 2 to 6, average 3.7±1.02 (min 1, max 6, N=330) (Potapov *et al.*, 2002a; Gombobaatar, 2006). Typical egg colour is reddish-brown with dark brown spots, blotches and markings. Colour of eggs changes depending on sunlight and duration of incubation. Egg length is 56.52 ± 2.0 (SD) mm (min 50.86, max 66.2, N=220), width 46.69 ± 1.6 mm (min 32.5, max 47.24, N=90), weight 50.64 ± 5.9 gr. (min 36., max. 65, N=90) on average. Both adults incubate eggs for 31.5-38.5 days. From 1998 to 2005, average number of hatchlings was 3.34 (min. 1, max. 6, N=401) and number of fledglings was 2.8± 0.7 (min.1, max. 6, N=401) (Gombobaatar, 2006). According to Gombobaatar (2006), a total of 60 species of birds and 16 species of mammals were found in diet of the Saker Falcon all year round from 1998 to 2006. Dominant prey species of birds were Horned Lark (*Eremophila alpestris*) (4%), Greater Short-toed Lark (*Calandrella rufescens/brachidactyla*) (2.3%), Mongolian Lark (*Melanocorypha mongolica*) (2.1%), Eye-browed Thrush (*Turdus obscurus*) (2.1%), Brandt's Vole (51%), Mongolian Gerbil (*Meriones unguiculatus*) (3.9%), Midday

Gerbil (*Meriones meridianus*) (2.5%), Daurian Pika (*Ochotona daurica*) (1.2%) within total diet. There was no difference between number of birds (45%) and mammals (55%) in autumn and winter diet. Minimum distance moved by male was 115 km and by female 42 km on average. Home range sizes by Minimum Convex Polygon were 214.7 km² for breeding males and 78.2-103.9 km² for females in 1999. Overlapping of home range of neighboring breeding pairs was 70-98% (Potapov *et al.*, 1999b, 2000, 2001a; Gombobaatar, 2006). Adults and young birds hunt Brandt's Vole until mid-September depending on food availability, weather conditions and threat factors. Most young birds start to migrate in early October. Experienced adult birds winter near their nest and actively defend the nest.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 6. Rocky areas; 8. Desert (8.2.); 11. Artificial-Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation(human-induced)- 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation associated with habitat drought. The habitat drought leads to a crash of prey species like Brandt's Vole.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species. Some breeding pairs desert their nest site with eggs. 1.3.3. Wood

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near the area where the species breeds are major threats, causing the species to abandon the site.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

3.5.2. Sub-national/national trade- 3.5.3. Regional or international trade: Today, Mongolia's Saker Falcon population is threatened by illegal trapping, effects from Brandt's vole poisoning, and electrocution (Gombobaatar *et al.*, 2003). Trapping for the falconry trade, especially the export trade to the Middle East, is growing rapidly. It is not known how many falcons are legally and illegally trapped in Mongolia each year, or to what extent trapping is affecting the breeding population. Three hundred licenses are supposedly sold each year, but as many as 250 falcons were taken by license in 2004 from Sukhbaatar province alone (Zahler *et al.*, 2004). Saker numbers are closely related to vole cycles (Bold & Boldbaatar, 2001; Gombobaatar, 2006) and fluctuate naturally. Nevertheless, widespread use of rodenticides is causing increased falcon mortality (Gombobaatar, 2006). The extent to which these different factors contribute to Saker declines in Mongolia requires urgent analysis. However, it appears that a major factor has been an unsustainable trade in Saker Falcons with the Middle East (Badam, 2001). There is no estimate of illegal trading of the falcon in Mongolia. However, the Mongolian Government gave official licenses as gift and sales to Saudi Arabia, Kuwait, United Arab Emirates, Qatar, and others for 25 birds in 1998, 61 in 1999, 50 in 2000, 184 in 2001, 303 in 2002, 392 in 2003, 365 in 2004, and 385 in 2005 (Gombobaatar, 2006).

4. Accidental mortality -4.1. By-catch-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: Arab falconers trap Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are very attractive to other birds of prey in the steppe. Raptors such as Saker Falcon, Peregrine Falcon, Barbary Falcon, Upland Buzzard, Long-legged Buzzard, Steppe Eagle, Golden Eagle, Northern Goshawk (on migration) entangle with these loops and eventually die. Nestlings and adult birds may also fatally entangle with nesting materials such as synthetic string and ropes (Potapov *et al.*, 1999a; Gombobaatar, 2006).

4.1.2. Terrestrial-4.1.2.2. Shooting: People shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Electrocuted and collided birds are regularly found underneath 15 KV and other types of high power electric lines in Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

4.2.2. Vehicle collision: Some young birds fall from poles and sometimes electricians drop nests with chicks near busy roads. At night and occasionally during the day these young birds may crash into fast driving cars (Gombobaatar, 2006).

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species) -6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters- 7.2. Storms or flooding-7.3. Temperature extremes: In early spring, eggs and downy chicks overcool from coldness, heavy rain and strong storms. Some nests with eggs and chicks on poles, roofs of buildings, and towers have been blown away (Gombobaatar, 2006).

8. Changes in native species dynamics -8.1. Competitors: Neighbouring nest competitors like Upland Buzzard, Golden Eagle and Steppe Eagle threaten breeding pairs during the breeding season.

8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. Northern Raven takes eggs when parents are absent from the nest. Eurasian Eagle-owl may prey upon adults and chicks less than 2 weeks old.

8.3. Prey or food base: Crash of Brandt's Vole number affects breeding success (Bold&Boldbaatar, 2001; Gombobaatar, 2006).

8.5. Pathogens or parasites: Avian influenza is a potential threat to the species. Lack of food leads the breeding birds to eat own chicks and larger chicks take smaller (Gombobaatar, 2006&2006a).

10. Human disturbance -10.1. Recreation and tourism: Breeding pairs have been disappearing from historical breeding sites due to construction of tourist camps near the sites.

10.4. Transport: Transport of cars near tourist camps and busy roads have been negatively affecting the individuals that nest near the roads (Gombobaatar, 2006). In April and May, electricity companies remove all nests on poles. Field workers throw away all nests with eggs and chicks (Gombobaatar, 2006).

Conservation Measures: Listed in CITES Appendix II. Single species national action plan for Saker Falcon research and conservation in Mongolia was issued by Mongolia Government on 21 March of 2005. Approximately 7.9% of the species' range in Mongolia occurs within protected areas. In order to support breeding success, building nesting substrates is a potential conservation measure for the species (Ellis *et al.*, 2001a; Sumiya *et al.*, 2003; Potapov *et al.*, 2003&2004; Munkhbayar *et al.*, 2004; Gombobaatar *et al.*, 2005a; Munkhbayar *et al.*, 2005; Gombobaatar, 2006; Dixon *et al.*, 2008).

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

82. Scientific Name: *Falco rusticolus*

Species Authority: Linnaeus, 1758

Common Names: Gyr Falcon or Gyrfalcon (English), Tsagaan shonkhor or jadan shonkhor (Mongolian)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is very limited. Records in the country are doubtful. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Brazil, Saint Pierre and Miquelon, Greenland,

Iceland, Ireland, Portugal, Spain, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Switzerland, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Poland, Finland, Latvia, Ukraine, Estonia, Russian Federation, Kazakhstan, Pakistan, China, Japan.

Regional Distribution: According to Dawaa *et al.* (1994), birds winter in mountains and mountain steppe in Mongol-Altai and Khangai Mountain Ranges. Recent winter records were in lower Ulz River valley, Hentii Mountain Range (Tsevenmyadag *et al.*, 2005) and Borig del and Altan els of Uvs province (Sh. Boldbaatar pers. comm.).

Population: The global population consists of 110,000 mature individuals. Global breeding and resident ranges are estimated at 8,930,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a very rare winter visitor. The species arrives in wintering sites by late November and stays in the country till January. There are only a few records of the species, and these are doubtful due to lack of documentation. This species is a bird of tundra and mountains with cliffs or a few patches of trees. Some wintering female Saker Falcons look almost like Gyr Falcons. Upperparts brown with barring, underparts white with sparse drop-shaped markings, almost white head, lack of a moustache and large body of the female Sakers (*milvipes* type) in Mongolia resembles a female Gyr Falcon. Gombobaatar *et al.* (2011a) and other field guides may be helpful for field identification in Mongolia. It feeds only on birds and mammals. Most prey is killed on the ground, either captured there or, if the victim is a flying bird, forced to the ground. The diet is to some extent opportunistic, but most breeding birds rely on *Lagopus* grouse and other avian species. Avian prey range in size from Redpolls to Geese and include corvids and smaller passerines. Mammalian prey range in size from vole to hare (Ferguson-Lees & Christie, 2001).

Habitat Type: 3. Shrub-land (3.4. only during the hunting); 4. Grassland (4.1., 4.4. in wintering); 5. Wetlands (5.4. only in a wide lake and river valleys); 6. Rocky areas (in wintering).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/;
3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are under high threat of Arabian falconers/;
4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1.-Trapping and netting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning/;
5. Persecution -5.1. Pest control /see 4.1.2.3./;
6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/ 6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/;
7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that are the main prey of the species/;
8. Changes in native species dynamics-8.2. Predators and 8.3. Food/prey base /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species/;
10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near wintering sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. It is covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 20.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes
Family: Falconidae

83. Scientific Name: *Falco peregrinus*

Species Authority: Tunstall, 1771

Common Names: Peregrine Falcon (English), Egel shonkhor (Mongolian)

Subspecies in Mongolia: *F. p. calidus*, *F. p. peregrinus* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown, however it is uncommon in Mongolia. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Guatemala, Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Rwanda, United Republic of Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Macao, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Solomon Islands, New Caledonia, Vanuatu, Fiji, Samoa. This species is considered vagrant in Iceland, Faroe Islands, Burundi, Qatar, Seychelles, Mauritius, Maldives, Christmas Island, Micronesia.

Regional Distribution: The species migrates along Great Lakes Depression, Khangai, Hövsgöl, Hentii Mountain Range, Herlen-Ulz River basin, Zuungar Depression, Gobi-Altai, and Trans-Altai Gobi. This species may breed in the Hövsgöl region (Kozlova, 1930; Bold, 1973; Shagdarsuren, 1964&1983; Piechocki, 1968; Kleinstäuber & Succow, 1978; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin

& Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tsevenmyadag *et al.*, 2005; Stenzel *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). S. Gombobaatar, D. Sumiya and E. Potapov observed a male passing food to a female near a cliff at Ongotsny Ulaan, Khovd town, Khovd province in June, 2001. Electrocuted young Peregrine was also found in Choir, Gobisumber province in September, 2002 (S.Gombobaatar pers. comm.).

Population: The global population consists of 1,200,000 mature individuals. Global breeding and resident ranges are estimated at 46,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this species is a summer visitor. It is possibly a rare breeding visitor. Breeding and summering birds arrive in summering and possible breeding sites by late April-early May. Breeding season is possibly the same as Saker Falcon in Mongolia. The Peregrine Falcon lives mostly along mountain ranges and river and lake valleys with rocks and cliffs. The Peregrine Falcon feeds almost exclusively on medium sized birds such as doves, waterfowl, songbirds, waders and pigeons. It rarely hunts small mammals, but will on occasion take voles, hares, and mice. It searches for prey either from a high perch or from the air. Once prey is spotted, it begins its stoop, folding back the tail and wings, with feet tucked (Ferguson-Lees & Christie, 2001). It makes its nest in a scrape, normally on cliff ledges and crakes. Cliff nests are generally located under an overhang, on ledges with vegetation, and south-facing sites are favoured. Female lays mostly 3-4 eggs (range 1-5) of white to buff colour with red or brown markings. The eggs are incubated in the scrape for 29 to 33 days, mainly by the female. The male also helps with the incubation of the eggs by day, but at night only the female incubates. Chicks fledge 42 to 46 days after hatching, and remain dependent on their parents for up to two months (Ferguson-Lees & Christie, 2001). Most potential breeding sites will be in high rocky mountain areas near large rivers such as Khovd, Buyant, Selenge, Orkhon and Tuul Rivers. According to field observations and the above observation data, the species migrates through the country by late August-early September, depending on food availability (migratory birds), and weather conditions. Wintering birds were recorded in Mongolia (Stubbe *et al.*, 2010).

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (inland) (5.1., 5.5., 5.7. with cliffs; 5.9. on migration); 6. Rocky areas; 8. Desert (8.2.); 11. Artificial – Terrestrial (11.3., 11.5. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected to the species/-1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats;/ 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places. Arab falconers trap this species in Mongolia;/ 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1.-Trapping and netting /Arab falconers have been trapping Saker Falcons in Mongolia using pigeons with loops made of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. This species may take these harnessed pigeons, become entangled in the loops and usually die in the steppe/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./-4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning on autumn migration/, 4.2. Collision -4.2.1. Pylon and building collision /collided birds were found under a pole of the 15 KV power line in Central Mongolia. On 25 August, 2011, one electrocuted immature falcon was found underneath 15 KV power line pole at Mandal-Ovoo sum, Ömnögobi province (S.Gombobaatar pers. comm. and photographs)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/ 6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of

the potential threats to the species/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that are the main prey of the species/, 7.3. Temperature extremes /possibly overcooling of eggs and young chicks in the nest during early breeding period/; 8. Changes in native species dynamics-8.2. Predators and 8.3. Prey or food base /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting to the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix I. Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Falconidae

84. Scientific Name: *Falco pelegrinoides*

Species Authority: Temminck, 1829

Common Names: Barbary Falcon, Red-capped Falcon, Red-naped Falcon or Shaheen (English), Shiliin shonkhor (Mongolian)

Subspecies in Mongolia: *F. p. babylonicus* (see Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as a rare passage migrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Morocco, Mali, Portugal, Spain, Algeria, Burkina Faso, Niger, Italy, Tunisia, Cameroon, Libyan Arab Jamahiriya, Malta, Greece, Sudan, Egypt, Turkey, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Islamic Republic of Iran, Kazakhstan, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal.

Regional Distribution: A single bird was collected by P.K.Kozlov at Ih Bogd on 11 October, 1899 (Kozlova, 1932); an individual was seen at Gobi tourist camp near Dalanzadgad on 16 June and 18 June, 1989 (Stephan, 1994); a bird was recorded at 15 km SW of Zuunbayan sum of Dornogobi province (Kurochkin & Michailov, 1994; Stubbe *et al.*, 2010); adult bird was found at dry river bed with Elm trees near Tsogt-Ovoo sum, Ömnögobi province on 02 August, 1997 (Stubbe *et al.*, 2010); bird was recorded at Bayan-Ovoo sum, Ömnögobi province on 20 July, 2009 (Stubbe *et al.*, 2010); Airag Lake of Zavkhan sum, Uvs province (Fomin&Bold, 1991; Dawaa *et al.*, 1994; Stubbe *et al.*, 2010); Inget Tolgoi (Erdenet), Bulgan province in 2008 (Sh.Boldbaatar pers. comm.); and Khovd River valley of Tsengel sum of Bayan-Ölgii province in 2008 (N.Tseveenmyadag pers. comm.).

Population: The global population consists of 5,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this species is a summer visitor and rare passage migrant. During the autumn and spring migrations, passage birds were recorded in different parts of Mongolia. It might

breed in rocky mountains in desert steppe and Gobi Desert in SW Mongolia, but there is no proof of this. Amateur birders can easily confuse it with Peregrine Falcon due to similar appearance of young birds of these species in the field. This species feeds chiefly on birds, which it normally takes in mid-flight and often at high speed. Although some birds disperse short distances in the non-breeding season, most are resident in one area year round (Ferguson-Lees & Christie, 2001). A member of The State Professional Inspecting Agency of Mongolia and experts checked the falcons trapped by Arabian trappers and found 3 females of the species, caught in Bayankhongor and Övörkhongai provinces in September, 2010 (S.Gombobaatar pers. comm. and photographs).

Habitat Type: 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2.); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic, 1.3. Extraction-1.3.1. Mining
1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /Arabian trappers traps the species in Mongolia in 2010/ 4. Accidental mortality -4.1.2.3. Poisoning / see Saker Falcon's dominant threats/, 4.2. Collision -4.2.1. Pylon and building collision /see Saker Falcon' dominant threats/; 6. Pollution (affecting habitat and species) - 6.2. Land pollution -6.2.2. Domestic; 8. Changes in native species dynamics -8.2. Predators-8.3. Prey or food base; 10. Human disturbance-10.4. Transport.

Conservation Measures: Listed in CITES Appendix I. Approximately 47.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

85. Scientific Name: *Pandion haliaetus*

Species Authority: (Linnaeus, 1758)

Common Names: Osprey (English), Zagasch yavlag or yavlag sar (Mongolian)

Subspecies in Mongolia: *P. h. haliaetus* (see Howard & Moore (1994&2003) and Wild Bird Society of Japan (2000) for further details)

Taxonomic note: *Pandion haliaetus* (Sibley & Monroe, 1990&1993; Christidis & Boles 1994) was split into *P. haliaetus* and *P. cristatus* by Christidis & Boles (2008) but this treatment is not followed by the BirdLife Taxonomic Working Group (BTWG) because the authors base their treatment on molecular analyses published by M. Wink outside the peer-reviewed literature.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining, drought and human disturbance it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (Germany), N.Batsaikhan (Mongolia), Kh.Munkhbayar (Mongolia), D.Usukhjargal (Mongolia), B.Gantulga (Mongolia), D. Batmunkh (Mongolia), and Valentin Schatz (Germany).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile,

Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Monaco, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, the Democratic Republic of the Congo, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, This species is regionally extinct in the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Solomon Islands, New Caledonia.

Regional Distribution: This species breeds at Buyant, Khovd, Bulgan River basins and Khoton, Khorgon, Dayan Lake valleys (Mongol-Altai Mountain Range); Khovd and Böhörön Rivers (Kharkhiraa and Turgen Mountains); the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Tamir River (Khangai Mountain Range); Ider, Chuluut River valleys (Tavvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Orkhon, Selenge, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder and Bulnai Rivers (Hentii Mountain Range); Upper Herlen River (Herlen-Ulz River basins); Nömrög River (Buir Lake-Khalkh River-Khyangan region). On migration, it is found in the breeding areas and also valleys of Tes River, Great Lakes Depression, Khangai Mountain Range, South Khangai Plateau, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Tkachenko, 1920; Kozlova, 1930; Shagdarsuren, 1964; Bold, 1965; Bold, 1969; Bold, 1973; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 500,000 mature individuals. Global breeding and resident ranges are estimated at 31,500,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a breeding visitor. Most breeding and migrating individuals arrive in Mongolia by late April-early May. Breeding pairs build own stick nest made of dry twigs and branches in tall dry poplar, pine and larch trees near lakes and rivers with abundant fishes (Shagdarsuren, 1964; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding begins in late April-mid-May. It is single-brooded. The female usually lays 3 (2-4) eggs of creamy to yellowish colour with chestnut red to dark brown spots and pale greyish markings. Incubation is 35-38 days. The female broods young. The male brings food to the female and chicks. Both parents and young feed on small to medium-sized fishes from freshwater lakes and rivers. On migration, individuals occur singly or in small groups. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 5. Wetlands (inland) (5.1., 5.5.); 11. Artificial – Terrestrial (11.3., 11.4. near forested areas).

Dominant Threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which the water and fishes contaminated by heavy metals like mercury.

1.3.3. Wood - 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging: Small-scale logging for fuel and construction materials is a potential threat to the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults, are major threats, causing the species to abandon the site. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). The loss of inflow from the Zavkhan River and the receding water levels have already led to localized fish mortalities along the channel that formerly connected Zost Lake to the main lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). This high mortality of fishes in the area is presumably a cause of the low breeding success of breeding birds and disappearance of migrants.

1.7. Fires: Forest and steppe fires burn trees in their breeding habitats near lakes and rivers. Fires may burn nests with eggs and occasionally young hatchlings.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Abandoned gill nets along the lake shores are a potential hazard both to local livestock and this species. Gilbert *et al.* (2009), Batmunkh *et al.* (2010) mentioned that the herders around the southwestern shores of Khar Lake were extensively ice-fishing at the site during the winter months. This could have an effect on piscivorous species and may even have the potential to devastate local fish stocks.

4.1.2. Terrestrial-4.1.2.2. Shooting: This is a potential threat to the species through the commercial production of stuffed souvenirs.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with fishes near forested areas in Mongolia are important habitats for the species. Due to the drought of the last few years, important sites have dried out and the Osprey have been losing their habitats and food.

8. Changes in native species dynamics-8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting this species the breeding individuals.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Included in CITES Appendix II. Approximately 11.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

86. Scientific Name: *Pernis apivorus*

Species Authority: (Linnaeus, 1758)

Common Names: European Honey-buzzard or Eurasian Honey Buzzard (English), Balch goorbis or goorbis (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Andorra, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Seychelles, Uzbekistan, Afghanistan.

Regional Distribution: A single bird was observed on a poplar tree at the Tövshin tourist camp (38 km NW of Dalanzadgad town) of Ömnögobi province on 26 May, 1998. A second bird was recorded on a poplar tree at the "Juulchin Gobi" tourist resort of Ömnögobi province on 22 August, 1998 (Bold & Boldbaatar, 1999; MNE & JICA, 2001; Boldbaatar, 2001; Boldbaatar, 2002; Stubbe *et al.*, 2010). However, these records are very isolated from the main breeding range and migration range as well.

Population: The global population consists of 350,000 - 1,000,000 mature individuals. Global breeding and resident ranges are estimated at 8,990,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this species is a vagrant. Migratory birds occur singly in southern Mongolia on migration. The records are isolated from the main distribution areas. Migrating individuals are recorded by mid-April-early May (on spring migration) and by late August-early September (on autumn migration). We have excluded some records due to likely misidentification in the field. It feeds on the larvae and nests of wasps and hornets, although it will take reptiles, birds and small mammals. The specific name *apivorus* means "bee-eater", although bees are much less important than wasps in its diet (Ferguson-Lees & Christie, 2001).

Habitat Type: Potential habitats are 1. Forest (1.4. only on migration); 6. Rocky areas (only on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation(1.3.3. Wood - 1.3.3.1. Small scale subsistence - 1.3.3.2. Selective logging, 1.4. Infrastructure development- 1.4.1. Industry- 1.4.3. Tourism and recreation, 1.7. Fires); 4. Accidental mortality-4.1.2. Terrestrial- 4.1.2.3. Poisoning; 5. Persecution-5.1. Pest control, 6. Pollution -6.2. Land

pollution- 6.2.2. Domestic; 7. Natural disasters-7.1. Drought; 10. Human disturbance-10.1. Recreation and tourism - 10.5. Fire.

Conservation Measures: Listed in CITES Appendix II. Specific conservation measures have not been implemented for this species in Mongolia. It migrates through protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

87. Scientific Name: *Pernis ptilorhynchus*

Species Authority: (Temminck, 1821)

Common Names: Oriental Honey-buzzard, Crested Honey-buzzard or Asiatic Honey Buzzard (English), Sogsoot goorbis or sogsoot zögiich sar (Mongolian)

Subspecies in Mongolia: *P. p. orientalis* (see Howard & Moore (1994); Dawaa *et al.* (1994); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and human disturbance it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Egypt, Turkey, Russian Federation, Israel, Saudi Arabia, Jordan, Islamic Republic of Iran, Kazakhstan, Kuwait, United Arab Emirates, Oman, Uzbekistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Macao, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: In Mongolia, this species may breed in mixed forest in C&E Khangai Mountain Range. It migrates through forested mountain and river valleys of Terelj, Onon, Balj, Ulz and Herlen Rivers (SE Hentii) and Tuul, Orkhon, Kharaa and Selenge Rivers (SW Hentii) (Kleinstaeuber & Succow, 1978; Mauersberger, 1982; Stephan, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold *et al.*, 1996; Kovats, 1997; MNE & JICA, 2001; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 100,000 - 1,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a passage migrant and possibly a breeding visitor. Most summering and breeding individuals arrive in Mongolia by late April-early June. Breeding begins in late April-mid-May. Both adults build a stick nest made of twigs, branches, and dried plants lined with softer plant matter. Breeding pairs nest in deciduous and coniferous trees in forest and forest steppe. Female lays 1-3 eggs of white to creamy buffish, variably marked with chestnut to reddish-brown spots and markings. Both sexes incubate the eggs for 30-35 days. Both parents brood young and feed them on insects, mostly larvae of wasps and bumble bees (Ferguson-Lees & Christie, 2001). On migration,

it is found singly or in small loose flocks of 3-20 individuals soaring high above taiga forest to Gobi Desert. Breeding and migrating individuals leave Mongolia for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 6. Rocky areas (on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation(human-induced)-1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to this breeding species/, 1.7. Fires /forest fires burn trees with nests in breeding habitats. Fires may burn nests with eggs/; 3. Harvesting -3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /people occasionally shoot it for display as a stuffed souvenir/ -4.1.2.3. Poisoning /Insecticides used against insects like Siberian Moth cause individual poisoning through the food chain and low breeding success of the species in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision / Collided birds are very occasionally found underneath 15 KV power poles in Central Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a potential threat to breeding success of the species, associated with habitat change/; 8. Changes in native species dynamics -8.2. Predators /an increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Stubbe *et al.*, 2010; Uganbayar & Gombobaatar, 2010)/ 10. Human disturbance -10.4. Transport /transport of cars near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 9.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

88. Scientific Name: *Milvus migrans*

Species Authority: (Boddaert, 1783)

Common Names: Black Kite or Black-eared Kite (English), Sokhor elee (Mongolian)

Subspecies in Mongolia: *M. m. lineatus* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); Ferguson-Lees & Christie (2001) for further details)

Taxonomic note: *Milvus migrans* and *M. lineatus* (Sibley & Monroe, 1990&1993) have been lumped following AERC TAC, a treatment supported by review by the BirdLife Taxonomic Working Group of the *Milvus* phylogeny presented by Johnson *et al.* (2005) which nests *lineatus* within the *migrans* clade. Johnson *et al.* (2005) show that yellow-billed populations belonging to *aegyptius* and *parasitus* do form a separate clade but the authors point out that further studies are needed to help clarify sister relationships within the group. For these reasons it is felt premature to split members of *M. migrans*.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Virgin Islands British, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Papua New Guinea.

Regional Distribution: This species nests on cliffs and in trees covering all suitable nesting habitats from taiga forest to the Gobi Desert for the country (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Gombobaatar, 2006; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). It migrates throughout Mongolia. The species occurs in high numbers near urban areas (Kozlova, 1930; Bold, 1969; Mauersberger *et al.*, 1982; Shagdarsuren, 1964&1983; Piechocki, 1968; Bold, 1977; Baumgart, 1978; Piechocki, 1981; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Shar & Baasanjav, 2006; Stubbe *et al.*, 2007; Boldbaatar, 2008; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 1,000,000 - 6,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a common breeding visitor. Breeding and summering individuals arrive in breeding and summering sites by late March - mid-April, depending on weather conditions. Breeding begins in late April-early May. Breeding pairs nest in cliffs, trees, on rocks, sandy precipices, and rarely on river banks, and poles, pylons, and abandoned buildings. Breeding pairs lay 3-4, rarely 1-5 eggs of a non-glossy white colour variably spotted or blotched with reddish or purplish-brown. Both parents incubate the eggs for 28-30 days. Chicks fledge at c. 42 days. It is an opportunistic feeder, preying on live prey such as voles, gerbils, mouse, hedgehogs, and small birds, and also scavenging leftovers of human food. Individuals occur singly or in loose small groups of 3-30 individuals on migration. After breeding season and migration, it is gregarious and forms flocks of up to 100 individuals. They leave the breeding site for wintering grounds by late early September-early October, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 6. Rocky areas; 8. Desert (8.2. with scattered trees in breeding and on migration); 11. Artificial - Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to this breeding species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / ecotourism development, human settlement, tourist camps and other infrastructures near breeding sites are major threats, causing breeding pairs to desert the nest containing eggs/, 1.7. Fires /forest fires may burn trees with nests, eggs and occasionally young hatchlings in breeding habitat/; 3. Harvesting

-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places. Local people believe that the liver of the Kite treats human liver cancer. Therefore, some people shoot Kites and sell the liver. There is no medical proof for this/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting / see 3.5.1. and 4.1.2.2. / -4.1.2.3. Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tsevenmyadag *et al.*, 2005)/, 4.2. Collision -4.2.1. Pylon and building collision: Collided birds are very occasionally found underneath 15 KV power poles in Central Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a potential threat to breeding success of the species, associated with habitat change/; 8. Changes in native species dynamics -8.2. Predators /an increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. This species is one of the nest competitors of Saker Falcon (Gombobaatar, 2006). Eurasian Eagle-owl prey on chicks in the nest/; 10. Human disturbance- 10.4. Transport /transport of cars near tourist camps and busy roads have been negatively affecting breeding individuals /, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 12.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

89. Scientific Name: *Haliaeetus leucoryphus*

Species Authority: (Pallas, 1771)

Common Names: Pallas's Fish-eagle or Pallas' Sea Eagle (English), Usny nömrögburged or usny nömrög burged (Mongolian)

Global Status: Vulnerable, C2a(ii)

Regional Status: Endangered, C1

Rationale for Assessment: This species has been assessed as Endangered, C1 because there are estimated to be less than 300-400 mature individuals in Mongolia and the population is estimated to have undergone a decline of at least 20% in the last five years. The continuing decline in this species' population is primarily due to drought causing a loss of wetland habitat. Human disturbance and overgrazing also threaten this species' survival. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009- Endangered

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Netherlands, Norway, Finland, Ukraine, Russian Federation, Israel, Saudi Arabia, Iraq, Islamic Republic of Iran, Kazakhstan, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Cambodia.

Regional Distribution: Mongolia remains an important stronghold for the species. However, the absence of prior targeted surveys and baseline population data precludes comment on population trends at this time (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Birds were recorded by various researchers and field biologists as follows: Hövsgöl Lake area (breeding record near lake) (Buturlin, 1913), (most possibly breeding at delta of Khoroo, Khodon, Berh, Alagtsar, and Jargalant Rivers) (Sumiya & Skryabin, 1989);

Uvs Lake of Uvs province (a female in August, 1962 or 1964) (Piechocki, 1968); Airag Lake (6 adults and 15 immature in June 1995, (A. Bräunlich in litt. 2000; BirdLife International, 2001); Achit Lake, Bayan-Ölgii province (an immature male in July, 1962) (Piechocki, 1968; Fomin & Bold, 1991); Buyant River, Khovd province (one immature in May, 1995 (A. Bräunlich in litt. 2000; BirdLife International, 2001; Gombobaatar, 2012); Chono Kharaiikh River (a bird in June, 1978) (Piechocki *et al.*, 1981); (an adult and 1 immature in May, 1995) (BirdLife International, 2001; A. Bräunlich in litt. 2000; BirdLife International, 2001); Khar Lake, Khovd province (Fomin & Bold, 1991); steppe near Khovd River, Khovd province in May 1901 (specimen in AMNH); Khar-Us Lake (Fomin & Bold, 1991); (an immature in May, 1995 (A. Bräunlich in litt. 2000; BirdLife International, 2001); (an immature bird in August–October, 1996 (Kováts *et al.*, undated); Dörgön Lake (Fomin & Bold, 1991); Bulgan River, Khovd province in July 1962 or 1964 (Piechocki, 1968); 60 km from Mandalgobi (an individual in April, 1977) (Stephan 1994); Zavkhan River, Gobi-Altai province (Fomin & Bold, 1991); Hövsgöl Lake in December 1912 (Piechocki, 1983, specimen in NHMW); Tamir River, Arkhangai province (one collected in July c.1926, and in the eastern outskirts of the Khangai the last straggler was noted on 22 September) (Kozlova 1932); Ögii Lake (immature male collected in June 1962 or 1964) (Piechocki 1968); Bööntsagaan Lake, Bayankhongor province (a female collected in June 1962 or 1964) (Piechocki, 1968); Orog Lake of Bayankhongor province (numerous on spring migration in 1926) (Kozlova, 1932); Khujirt, Övörkhangai (an immature in June, 1980 (Königstedt & Gleinich, 1988); Orkhon River, Selenge province (one adult flushed from a tall poplar tree east of the Orkhon waterfall in June 1978, with an immature bird later seen) (Mauersberger, 1979); east of the Orkhon waterfall (one adult in August, 1979, and one adult seen flying into a very old poplar forest in June 1980, taken to indicate that it breeds in this region) (Mauersberger *et al.*, 1982) (two bird in June, 1989) (Stephan, 1994); Tuul River, near Ulaanbaatar (one individual in May, 1979) (Stephan, 1994); Tuul River valley (breeding recorded in c.1926) (Kozlova, 1932); Bayan Bogd, Dornogobi province in September, 1933 (specimen in NRM); Dornod Mongol Daguur Strictly Protected Area (a very rare visitor that probably breeds in the area) (Tsevenmyadag in litt., 1997); Nömrög Strictly Protected Area (a rare breeding visitor) (Tsevenmyadag in litt., 1997). M.Beaman with Bird Quest birding tour, who has led tours from 1989 through 2008 has reported 1-3 eagles on every visit to Bööntsagaan Lake (made during late May and early June), but has never recorded nests there. M. Beaman also reported one second calendar year bird at a saline lake between Dörgön and Airag Lake on 26 May 2003, and up to 3 daily at Airag Lake (2ad, 1 2nd cal-year) on 26-27 May 2003, although again no nests were apparent. Mr M.Valkenburg and W.Faveyts who visited Achit Lake with Central Asia Birding this year made an interesting observation of two juvenile eagles on the southeastern shore of the lake on 17 and 18 June 2009. Surveys of literature sources yielded reports of PFEs in 15 of the 21 images of Mongolia. M.Gilbert *et al.* (2009) and Batmunkh *et al.* (2010) recorded the species at Ögii Lake, northwest corner of the lake (one adult on 20 July 2009); Orkhon River, W Ögii Lake/ca. 500 m south of concrete bridge (bridge: 47.78077°N; 102.63382°E) (an adult on river bank on 21 July, 2009); Orkhon River, W Ögii Lake/ near wooden bridge, 10.5 km NE of Ögii Lake (47.81883°N; E 102.60757°E) (one juvenile and adult on 23 July, 2009); Ögii Lake, northwest corner of the lake (one 1st or 2nd cal-year bird on 24 July, 2009); N Khar-Us Lake (two birds, presumably male and female based on size on 13 August, 2009); S Khar-Us Lake (one adult on southern shore, seen from observation tower on 14 August, 2009); Zost Lake along the creek joining Zost to Airag Lake (two adults on 15 August, 2009); Zost Lake (one adult feeding on Common Tern on east shore of lake on 15 August, 2009), Airag Lake (one adult sitting on Airag Lake at mouth of old creek from Zost to Airag Lake on 16 August, 2009); Zost Lake (two adults, presumably same as yesterday on 16 August, 2009); Zost Lake (1 juvenile seen with two adults along creek by camp during afternoon/evening on 16 August, 2009); Zost Lake (one additional juvenile joined 2 adults and juvenile by camp in evening and chased off by adults, therefore presumably from another pair on 16 August, 2009); Achit Lake (one adult sitting on a post over northern river deltas on 18 August 2009); Achit Lake (one juvenile along *Phragmites* stands on western shore and one subadult in roughly the same place on 18 August, 2009); Dalai Lake (one adult moulting-in central tail feathers was sitting on telegraph poles to north of lake on 22 August, 2009); Chono Kharaiikh River (one juvenile perched beside river on 21 August, 2009); Khar Lake (one subadult or juvenile seen north Khar Lake, same bird or another seen east Khar Lake on 22 August, 2009); Bööntsagaan Lake (possible subadult/juvenile seen at range through haze, north shore on 25 August, 2009 and one subadult (at least two years) and one adult

along eastern shore and river mouth respectively on 26 August, 2009). We found totaling 20 individuals including 12 adults, 3 subadults and 5 juveniles during the surveys in June-August, 2009 (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). According to these observations, this eagle is most likely to breed in the valleys of Achit Lake, Ögii Lake and Bööntsagaan Lakes. It migrates through the above-mentioned areas and open habitats near water in Gobi-Altai Mountain Range, Middle Khalkh Steppe and Valley of the Lakes (Kozlova, 1930; Sushkin, 1938; Piechocki, 1968; Fischer, 1970; Mauersberger *et al.*, 1982; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold *et al.*, 1996; Tseveenmyadag *et al.*, 2000 & 2005; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003 Boldbaatar, 2005a & 2008; Tseveenmyadag & Bold, 2005; Nyambayar & Tseveenmyadag, 2009; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). S.Gombobaatar and team of the Mongolian ornithological society photographed two pairs and one juvenile on northern shore, a long sand bar at the north of Ögii Lake on 15 August, 2010 (S.Gombobaatar and E.Unurjargal pers. comm. and photographs).

Population: The global population consists of 2,500-9,999 mature individuals. Global breeding and resident ranges are estimated at 5,270,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this is a rare breeding visitor. Migrating and breeding individuals arrive in Mongolia by late April-early May. Breeding begins in late May –mid-June. Breeding ecology is poorly known in the country. Breeding pairs build a stick nest of reeds and twigs in trees, cliffs and possibly high banks near large rivers and lakes (Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female lays 2-4 non-glossy dull white eggs. Both parents, but predominantly the female incubates for 35-40? days. Chicks fledge at 70 days. The young remain with parents till mid-August. Young, immature and adult birds hunt fishes in fresh water lakes and large slow running rivers in forest steppe, steppe, desert steppe and mountain steppe. On migration, individuals perch on tree tops and wood poles, resting on lake shores and river banks. Migrating and breeding individuals leave their summering and breeding site for wintering grounds by late August -mid-September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 5. Wetlands (inland) (5.1., 5.2. 5.5., 5.6., 5.7. with trees, 5.8., 5.9. , 5.13., 5.14. on migration); 6. Rocky areas (on migration); 12. Artificial – Aquatic (12.1. /dam/ 12.2. Ponds with fishes, 12.9. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which are contaminated by heavy metals like mercury.

1.3.2. Fisheries-1.3.2.1. Subsistence: Over-fishing. Illegal fishing activities were observed at two sites, Ögii and Khar Lakes. At Ögii Lake the widespread use of illegal gill nets presents a direct hazard to the species, and also impacts densities of potential prey species of Pallas' fish eagle such as Ide (*Leuciscus idus*) on the lake (Ocock *et al.*, 2006). Sections of abandoned nets are a common sight along the shores of the lake and are a hazard both to local livestock and wildlife (during work at the site in 2008, species found entangled in these nets included Great crested grebe, Kentish plover, White-cheeked starling and more than 100 rotting fish). The herders around the southwestern shores of Har Lake also reported extensive ice fishing activities at the site during the winter months. This has the potential to devastate local fish stocks (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010).

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds/ moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction

of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources. The loss of inflow from the Zavkhan River and the receding water levels have already led to localized fish mortalities along the channel that formerly connected Zost Lake to the main lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). This high mortality of fishes in the area is a cause of the low breeding success of breeding birds and disappearance of migrants.

1.7. Fires: Forest fires may burn nests with eggs and occasionally young hatchlings.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.2. Collision -4.2.1. Pylon and building collision: Collision is a potential threat to the species.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters -7.1. Drought: Several lakes of importance to Pallas's Fish Eagles have been experiencing a fall in water levels in recent years, particularly in the lakes within the Valley of the Lakes. Water levels at Bööntsagaan Lake, a prominent site for the species, appeared to be lower during surveys in 2009 in comparison to earlier WCS surveys in 2005 and 2006. Several shallow lakes to the southeast of the main lake had either contracted or dried completely during that time period. Orog Lake, to the east of Bööntsagaan Lake, was considered an important migratory stopover but has been completely dry since at least 2005. Clearly if these trends continue the suitability of water bodies in the Gobi Desert to support Pallas' Fish Eagle have a limited future (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010).

8. Changes in native species dynamics-8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

90. Scientific Name: *Haliaeetus albicilla*

Species Authority: (Linnaeus, 1758)

Common Names: White-tailed Eagle or White-tailed Sea Eagle (English), Tsagaansuult nömrögburged or tsagaansuul nömrög burged (Mongolian)

Subspecies in Mongolia: *H. a. albicilla* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: United States, Greenland, Iceland, Ireland, United Kingdom, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Tunisia, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Serbia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Saudi Arabia, Lebanon, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan. It is a regionally extinct vagrant in Portugal and is regionally extinct in Algeria and the Syrian Arab Republic. It has uncertain presence and origin in the Spain, Faroe Islands, Italy, Israel, Tajikistan.

Regional Distribution: This species breeds at Buyant and Khovd Rivers; a breeding record at Achit Lake valley (Vaurie, 1964) and large nest of the species in poplar tree at Achit Lake valley (Stubbe *et al.*, 2010) (Achit Lake); Uureg Lake (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); a nest with two infertile eggs at Ongotsny Ulaan rocky mountain at NW Khovd town, Khovd province on 12 June, 1974 and two infertile eggs in a nest at Ongotsny Ulaan mountain near Khovd town, Khovd province on 01 June, 1975 (Stubbe *et al.*, 2010); a nest with an infertile egg at Chono Kharaiikh River, Khovd province on 07-08 June, 1974 (Stubbe *et al.*, 2010); Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes (Great Lakes Depression); Tamir, Khanui and the upper Orkhon Rivers; brooding adults at Sangiin Dalai Lake valley /49°14'N; 099°04'E/ on 1 May, 2008 (N. Tseveenmyadag pers. comm.; Stubbe *et al.*, 2010) (Sangiin Dalai Lake valley); Ögii Lakes (Khangai Mountain Range); (Khan Höhii range); Terhiin Tsagaan, Sangiin Dalai and Telmen Lakes, and Ider and Chuluut Rivers (Tarvagatai-Bulnai Mountains); two juveniles in Larch tree at Sevsuul in 1979 and in Larch tree at Chodon gol in 1979 (Sumiya & Skryabin, 1989); two adults with a nest in Poplar tree at Eg-Uur delta, Erdenebulgan sum /50°01'N; 102°26'E/ on 23 August, 2000; a pair with a nest at Teshig, Bulgan /50°16'N; 111°55'E/ on 28 April, 2003 (Sh. Boldbaatar pers. comm.; Stubbe *et al.*, 2010) (Hövsgöl Mountain Range); Lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); a breeding at Khonin nuga (Wichmann, 2001) and a nest with two juveniles in Poplar tree in the valley of Minj River /49°19'N; 108°39'E/ on 26 July, 2002 (Stubbe *et al.*, 2010) (Upper Minj River); breeding birds in Onon and Balj River valleys /49°15'N; 113°03'E/ in 2007 (S. Gombobaatar pers. comm.; Stubbe *et al.*, 2010), a breeding record in the valley of Onon River at Bayan-Adraga sum, Hentii province on 29 March, 1977 (Baumgart, 1978; Stephan 1994), and one nest in a Poplar tree in the valley of Onon River, Bayan-Adraga sum, Hentii province /49°43'N; 111°27'E/ on 6 July, 2000 (N. Tseveenmyadag pers. comm.; Stubbe *et al.*, 2010); Tuul, Terelj, Huder, and Bulnai Rivers (Hentii Mountain Range); Herlen-Ulz River basins; Khalkh River; one nest on top of Elm tree in the valley of Nömrög River /46°55'N; 119°32'E/ on 10 May, 1996 (N. Tseveenmyadag pers. comm.; Stubbe *et al.*, 2010) (Buir Lake-Khalkh River-Khyangan region). It migrates through Valley of the Lakes, Bulgan River valley (Dzungariin Gobi) and Middle Khalkh Steppe areas (Tugarinov, 1916; Kozlova, 1930; Shagdarsuren, 1964&1983; Vaurie, 1964; Bold, 1969; Baumgart, 1978; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Bold *et al.*, 1996; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Wichmann, 2001; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Nyambayar & Tseveenmyadag, 2009; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). Two adult birds wintered in waste water pond, 25 km west of Ulaanbaatar city in 2008-2009 (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 20,000 - 39,600 mature individuals. Global breeding and resident ranges are estimated at 18,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating birds arrive in Mongolia by late April-early May. Breeding season continues from May-July. Breeding pairs construct a large stick nest of branches, twigs and tall plant stems on the top of old tall tree trunks or tall pillar rocks, in cliffs in high mountains, forest steppe and mountain massifs near freshwater lakes and rivers (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). The female lays 1-3 eggs of slightly glossy white colour. Mostly female, rarely male incubates the eggs for 35-45 days. The male hunts for diverse fishes and ducks such as Mallard, Common Teal, Shoveler, Eurasian Wigeon and Northern Pintails and brings to the nest. The female broods young and feeds chicks on the prey species. On migration, individuals and pairs occur in open steppe with scattered trees, river valleys with willow forest and deciduous trees, and rocky mountains. They rest on the ground near rivers and lakes on migration. Migrating and breeding individuals leave their summering and breeding site for wintering grounds by late August-early October, depending on food availability and weather conditions. A few adult and immature birds winter in Mongolia depending on wintering ducks in unfrozen open water areas.

Habitat Type: 1. Forest (1.1., 1.4.); 4. Grassland (4.4. on migration); (5.1., 5.2. 5.5., 5.6., 5.7. with trees, 5.8., 5.9., 5.13., 5.14. on migration); 6. Rocky areas; 11. Artificial – Terrestrial (11.3. on migration); 12. Artificial – Aquatic (12.1. Water Storage Areas on migration, 12.2. and 12.6. in wintering, 12.9. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which are contaminated by heavy metals like mercury.

1.3.2. Fisheries-1.3.2.1. Subsistence: Illegal fishing activities at Ögii and Khar Lakes may have serious impacts on densities of potential prey species of piscivorous species such as Ide (*Leuciscus idus*) on the lake (Ocock *et al.*, 2006). Sections of abandoned nets may cause entanglement of the species (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010).

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds/moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and other wetlands at night. This may increase the species' mortality rate.

1.4.6. Dams: Hydroelectric dams. The loss of inflow from the Zavkhan River and the receding water levels have already led to localized fish mortalities along the channel that formerly connected Zost Lake to the main lake. Should the reduction in water inflow lead to a disruption in salinity gradient from the brackish Airag Lake to the saline Khyargas Lake, then fish populations may be affected more widely. This may already have begun to affect piscivorous birds (2006 (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010), including White-tailed eagle and Great cormorants.

1.7. Fires: Forest fires burn trees with nests in breeding habitats. Fires may burn nests with eggs and occasionally young hatchlings.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.2. Collision -4.2.1. Pylon and building collision: Collision is a potential threat to the species.

6. Pollution (affecting habitat and species)

6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters -7.1. Drought: Several lakes of importance to White-tailed Eagle have been

experiencing a fall in water levels in recent years, particularly in Valley of the Lakes. Water levels at Bööntsagaan Lake, a prominent site for the species, appeared to be lower during surveys in 2009 in comparison to earlier WCS surveys in 2005 and 2006. Several shallow lakes to the southeast of the main lake had either contracted or dried completely during that time period. Orog Lake, to the east of Bööntsagaan Lake was considered an important migratory stopover, but has been completely dry since at least 2005. Clearly if these trends continue the suitability of water bodies in the Gobi Desert to support White-tailed Eagle have a limited future (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010).

8. Changes in native species dynamics- 8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Included in CITES Appendix I. Approximately 8.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

91. Scientific Name: *Gypaetus barbatus*

Species Authority: (Linnaeus, 1758)

Common Names: Lammergeier or Bearded Vulture (English), Ooch yol or yol (Mongolian)

Subspecies in Mongolia: *G. b. aureus* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Vulnerable, A2 (ac); C

Rationale for Assessment: This species has assessed as Vulnerable. Population reduction is observed. The population size is unknown but may qualify for a threat category; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Mauritania, Morocco, Portugal, Spain, Algeria, France, Andorra, Germany, Korea, Democratic People's Republic of, Switzerland, Tunisia, Austria, Namibia, Czech Republic, Croatia, South Africa, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Sudan, Bulgaria, Egypt, Zimbabwe, Turkey, Lesotho, Russian Federation, Tanzania, United Republic of, Uganda, Mozambique, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Palestinian Territory Occupied, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bhutan. It is regionally extinct in Italy, Liechtenstein, Bosnia and Herzegovina, Montenegro, Serbia.

Regional Distribution: Breeding birds at Chag Lake valley, Möst sum, Khovd province on 24 May, 1996 (Sh. Boldbaatar pers. comm.; Stubbe *et al.*, 2010); a nest in a cliff at Takhiin tal, Gobi-Altai province on 6 April, 1991 (Stubbe *et al.*, 2010) (Mongol-Altai Mountain Range); a fledgling at Gobi National Park /45°35'N; 093°47'E/ on 12 July, 2006 (P. Kaczensky pers. comm.; Stubbe *et al.*, 2010); breeding record

at Yol am, Zuunsaikhan 03 June, 1979 (Mauersberger *et al.*, 1982); a nest with a chick at Gurvansaikhan Mountain /43°43'N; 103°06'E/ on 27 July, 2004 (H. Wehrden pers. comm.; Stubbe *et al.*, 2010) and a chick at Gurvansaikhan Mountain /43°48'N; 103°28'E/ on 20 June, 2006 (S. Gombobaatar pers. comm.; Stubbe *et al.*, 2010); a nest with a chick at Gurvansaikhan Mountain /43°29'N; 103°51'E/ on 05 July, 2007 and at 43°30'N; 104°03'E on 05 July, 2007 (B. Ravjir pers. comm.; Stubbe *et al.*, 2010) (Gobi-Altai Mountain Range) east to Siilhem, Kharkhiraa and Turgen Mountains; Great Lakes Depression (Jargalant and Bumbat Khaikhan, Altan Höhii Mountains), Depression of Zavkhan River (Ih and Baga Buural); a nest in a cliff with one chick at KhanTaishir Mountain, Gobi-Altai province /46°10'N; 094°01'E/ on 05 May, 2001 (S.Gombobaatar pers. comm.; Stubbe *et al.*, 2010); South Khangai Plateau; a nest in a cliff with a chick at KhavTag Mountain, Dzungariin Gobi on 30 July, 2003 (H.Wehrden pers. comm.; Stubbe *et al.*, 2010); Baruun Khurai (Baitag Bogd, Ih Khavtag, and Takhiin Shar Nuruu Mountains); breeding record at Ikh Bogd and Bituutiin am (Bannikov & Skalon, 1948) (Valley of the Lakes); Aj Bogd; a nest with a chick at Bogd /43°27'N; 096°47'E/ on 07 July, 2004 (Stubbe *et al.*, 2010); Idrengiin Nuruu, Altan-Uul, Tsagaan Bogd, Sevree, Nemegt, and Tost Mountains (Trans-Altai Gobi); one juvenile at Khan Bogd Mountain /43°10'N; 107°16'E/ on 17 July, 2005 (Stubbe *et al.*, 2010); a nest with a chick at Baga Nomgon Range, Borzon Gobi on 25 July, 2001 (Stubbe *et al.*, 2007 & 2010); Eastern Gobi Depression. One breeding pair has annually nested at Erdenesant mountain of Töv province from 1997 to 2004 (Nyambayar *et al.*, 2005). Nests were found in the Middle Khalkh Steppe; a nest with a chick on a rock pillar at Adaatsag Mountain, Adaatsag sum, Dundgobi province /46°37'N; 105°46'E/ on 01 June, 2003 and 2007 (S.Gombobaatar pers. comm.; Stubbe *et al.*, 2010); Baga Gazryn Chuluu, Dundgobi province, Zorgol Khaikhan Uul, Töv province); one breeding pair with a chick in a cliff at Hustai Nuruu National Park /47°43'N; 105°49'E/ in 2004, 2005, 2006, 2009 & 2010 (D. Usukhjargal pers. comm.; Stubbe *et al.*, 2010) (Hentii Mountain Range). A nest with two chicks was at Khorgo volcano, Terhiin Tsagaan Lake valley 30 July, 2007 (Schleicher pers. comm.; Stubbe *et al.*, 2010). Solitary individuals have been observed at Choiryn Bogd, Ih Sansar (Choir), Darkhan (Darkhan), Yazaar Uul (Bayanmönh), Toono (Bayanmönh), Bayanhutag (Bayanhutag), Mönkhkhaan (Mönkhkhaan), Batkhaan, and Högnökhaan Mountains (Eastern Khangai), Erdenesant (Erdenesant) and Khangai Mountain Range (Kozlova, 1930; Shagdarsuren, 1964&1983; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005 & 2005a; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2007; Nyambayar & Tseveenmyadag, 2009; Stubbe *et al.*, 2007 & 2010; Usukhjargal *et al.*, 2010; S.Gombobaatar and D.Usukhjargal pers. comm.).

Population: The global population consists of 2,000-10,000 mature individuals. Global breeding and resident ranges are estimated at 8,750,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident species. Breeding season continues from early February to early-mid-August. Breeding pairs build nests of branches, twigs and animal bones in inaccessible high cliffs and ledges and large rock pillars of high mountain massif and rocky mountains in mountain and forest steppe at 1,400-3,200 m asl (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female lays 1-2 eggs of whitish colour with brown and purple blotches with a heavy yellowish or buff wash. The female incubates the eggs for 53-55 days. Nestlings can swallow large portions, including large pieces of bone from an early age. They can fly at 107-117 days. Young birds always re-visit nest at long intervals after leaving. Like other vultures it is a scavenger, feeding mostly from carcasses of dead animals. It usually disdains the rotting meat, however, and lives on a diet that is 90% bone marrow. The Lammergeier can swallow whole bones up to the size of a lamb's femur and its powerful digestive system quickly dissolves even large pieces. The Lammergeier has the skill of cracking bones too large to be swallowed by carrying them up to a height and then dropping them onto rocks below, smashing them into smaller pieces and exposing the nutritious marrow. This learned skill requires extensive practice by immature birds and takes up to seven years to master (Ferguson-Lees & Christie, 2001; Burton & Burton, 2002).

Habitat Type: 6. Rocky areas; 8. Desert (8.2. with cliffs).

Dominant Threats: 1. Habitat loss and degradation -1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding sites, are major threats, causing the species to abandon the site.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

3.2. Medicine -3.2.1. Subsistence use or local trade: Local people shoot it for the use of its stomach in traditional medicine.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.1.

6.1. Atmospheric pollution-6.1.1. Global warming, 6.2. Land pollution -6.2.2. Domestic: These are potential threats causing low breeding success of the species, associated with habitat change.

7. Natural disasters-7.3. Temperature extremes: Eggs and young chicks observed to have overcooled and died in Hustai Nuruu National Park (D.Usukhjargal pers. comm.).

8. Changes in native species dynamics- 8.3. Prey or food base: Mortality rate of livestock and wildlife is low in some years due to favourable weather conditions for these animals. This may lead to starvation of chicks. The phenomenon has also occurred for the breeding pairs in Hustai National Park and Adaatsag area in 2009 (S.Gombobaatar pers. comm.).

9. Intrinsic factors-9.1. Limited dispersal and 9.7. Slow growth rates are causes of low density of the species.

10. Human disturbance-10.1. Recreation and tourism and 10.4. Transport: Busy roads and local herder's spring camp site have been negatively affecting breeding individuals.

Conservation Measures: Included in Annex I of the Council Directive 79/409/EEC on the "conservation of wild birds", Annex II (fauna species under strict protection) of the International Convention for the Conservation of the European wildlife and the natural habitats (Bern Convention), as this has been confirmed by Law No. 1335/83. It is included in Annex II of the International Convention for the Conservation of migratory species of wild animals (Bonn Convention), Annex II of CITES and the Annex of the Ministerial Decision No.414985/1985 of the Greek Ministry of Agriculture. Approximately 8.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

92. Scientific Name: *Neophron percnopterus*

Species Authority: (Linnaeus, 1758)

Common Names: Egyptian Vulture (English), Delt yolon or delt burged (Mongolian)

Subspecies in Mongolia: *N. p. percnopterus* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Endangered, A2abcd+3bcd+4abcd

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea, Morocco, Mali, Portugal, Spain, Algeria, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin,

Belgium, Nigeria, Norway, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Serbia, Montenegro, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Ukraine, Bulgaria, Estonia, Egypt, Zimbabwe, Turkey, Republic of Moldova, Lesotho, Russian Federation, Tanzania, Uganda, Mozambique, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Palestinian Territory Occupied, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar.

Regional Distribution: In Mongolia, this species has been observed in the high mountain area between Gurvansaikhan Mountain range and Borzongiin Gobi. A single bird was recorded at Munkhkhairkhan Mountain, Khovd on 24 May, 1996. Sh. Boldbaatar observed a bird at the Dungenee valley of Gurvansaikhan Mountain, Ömnögobi province on 24 June 1998 (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold & Boldbaatar, 1999; MNE & JICA, 2011; Boldbaatar, 2002; Bold & Mainjargal, 2006; Stubbe *et al.*, 2010).

Population: The global population consists of 21,000-67,200 mature individuals. Global breeding and resident ranges are estimated at 18,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Single birds were observed in high mountain areas of the country. It forages in lowland and mountain regions over open, often arid, country. It has broad diet including carrion, insects, young vertebrates, eggs and even faeces (Ferguson-Lees & Christie, 2001). They prefer to perch and rest in cliffs and high rocks, and forage on the ground. Migrating individuals pass through southern high mountains by early March - early May (on spring migration) and by late August-early October (on autumn migration). A few individuals possibly summer in Mongolia.

Habitat Type: Potential habitats are 6. Rocky areas; 8. Desert (8.2. with cliffs).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation; 6.2. Land pollution -6.2.2. Domestic; 9. Intrinsic factors-9.1. Limited dispersal; 10. Human disturbance- 10.1. Recreation and tourism -10.4. Transport.

Conservation Measures: Listed in CITES Appendix II. The species passes through or summers in Gobi Gurvan Saikhan National Park and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

93. Scientific Name: *Gyps himalayensis*

Species Authority: Hume, 1869

Common Names: Himalayan Vulture, Himalayan Griffon or Snow Vulture (English), Himalain khajir or khimalain khajir burged (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and human disturbance it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Kazakhstan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bhutan, Thailand, Malaysia.

Regional Distribution: This species has been recorded at Gobi-Altai Mountain Range, Great Lakes Depression, Central Khangai Mountain Range, South Khangai Mountain Range, SW&SE Hentii Mountain Range; Middle Khalkh Steppe (Choiryn Bogd, Ih Sansar, Darkhan, Yazaar, Toono, Bayankhutag, Mönkhkhaan mountains) and Valley of the Lakes and Gobi (Trans-Altai, Alashani, S&W Northern and Eastern Gobi) (Shagdarsuren, 1964&1983; Piechocki, 1968; Kleinstäuber & Succow, 1978; Mauersberger, 1979; Mauersberger *et al.*, 1982; Stephan, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold *et al.*, 1996; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Nyambayar & Tseveenmyadag, 2009; Stubbe *et al.*, 2010). It may nest in Gurvansaikhan Mountain in Ömnögobi province (Gobi-Altai Mountain Range). However, there is no proof for this evidence for the country.

Population: The global population consists of 100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a summer visitor and passage migrant. Migrating individuals arrive in summering areas by late April-early May and leaves its breeding site for wintering grounds by late August-early September. This species may breed in high mountain regions in Mongolia, but breeding has not yet been confirmed in the country. Because an immature of this species appears similar to an immature Griffon Vulture, people sometimes confuse them in the field. Stubbe *et al.* (2010) and Gombobaatar *et al.* (2011a) may be helpful for field identification in Mongolia. This species, like other vultures, is a scavenger, feeding mostly from carcasses of animals, which it finds by soaring over open areas and mountains. It often joins with Cinereous vulture, and Eurasian Vulture, feeding together in gregarious groups of 3-42 individuals in the steppe in Mongolia.

Habitat Type: 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2., 8.3. on spring and autumn migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/; 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning/; 4.2. Collision -4.2.1. Pylon and building collision /potential threat to the species/ -4.2.2. Vehicle collision /feeding individuals near busy roads possibly hit a car while they took off/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Included in CITES Appendix II. Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

94. Scientific Name: *Gyps fulvus*

Species Authority: (Hablizl, 1783)

Common Names: Griffon Vulture or Eurasian Griffon (English), Ukhaa khajir or ukhaa khajir burged (Mongolian)

Subspecies in Mongolia: *G. f. fulvus* (see Howard & Moore (1994); Dawaa *et al.* (1994); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and human disturbance it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Western Sahara, Mauritania, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Togo, Niger, Belgium, Netherlands, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Russian Federation, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Palestinian Territory Occupied, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Nepal, Mongolia, Bangladesh, It is regionally extinct in Romania.

Regional Distribution: This species has been observed at Kharkhiraa Mountain and Bulgan River valley (Dzungariin Gobi). It was recently recorded in Mongol-Altai, Gobi-Altai Mountain Ranges; Great Lakes Depression, south- and south west Khangai Mountain Range, and Valley of the Lakes (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stenzel *et al.*, 2005; Bold *et al.*, 1996; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Tseveenmyadag *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 100,000 mature individuals. Global breeding and resident ranges are estimated at 10,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a summer visitor and passage migrant. Migrating individuals arrive in summering sites by late April-early May (on spring migration). Local birders and researchers may often misidentify this species in the field, making it difficult to assess its status and population. Stubbe *et al.* (2010) and Gombobaatar *et al.* (2011a) will be helpful for field identification in Mongolia. Like other vultures, it is a scavenger, feeding mostly from carcasses of dead animals which it finds by soaring over open areas, often moving in flocks. They forage on the ground on carrion together with Cinereous Vulture and Himalayan Vulture in Mongolia.

Habitat Type: 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2., 8.3. on spring and autumn migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning/, 4.2. Collision -4.2.1. Pylon and building collision /potential threat to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/.

Conservation Measures: Listed in CITES Appendix II. Approximately 13.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

95. Scientific Name: *Aegypius monachus*

Species Authority: (Linnaeus, 1766)

Common Names: Cinereous Vulture or Black Vulture (English), Nömrög tas or nokhoi tas (Mongolian)

Global Status: Near Threatened

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Spain (Balears), Gibraltar, France, Netherlands, Germany, Switzerland, Tunisia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Greece, Latvia, Sudan, Ukraine, Bulgaria, Belarus, Egypt, Turkey, Russian Federation, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan. It is a regionally extinct vagrant in Austria and the Czech Republic. It is regionally extinct in Italy, Slovenia, Romania, Moldova, Cyprus. Its presence and origin are uncertain in Morocco, Portugal, Albania, the Former Yugoslav Republic of Macedonia.

Regional Distribution: This species breeds in high mountains, forest steppe, steppe, desert steppe and Gobi Desert at Mongol-Altai, Gobi-Altai Mountain Ranges, Siilhem range, Kharkhiraa and Turgen Mountains, Great Lakes Depression (Jargalant and Bumbat Khaikhan, Altan Höhii), Depression of Zavkhan River (Ih and Baga Bural), Khangai, Hentii, and Hövsgöl Mountain Ranges (except dense

and deep forest), Herlen-Ulz River basins, Eastern Mongolia Plain (mountain slopes and steppe's low altitude rocky mountains), Dzungariin Gobi and Baruun khurai (Baitag Bogd, Ih Khavtag, Takhiin Shar Nuruu), Trans-Altai Gobi (Aj Bogd Atas Chingis, Edrengeiin nuruu, Altan-Uul, Tsagaan Bogd, Sevree, Nemegt, Tost), Northern Gobi, and the Eastern Gobi Depression. Solitary individuals and flocks of birds have been found on carcasses in almost all territories close to mountain ranges in the country (except taiga, wetlands and human settlements) on migration and during the non-breeding season (Kozlova, 1930; Gagina, 1961; Shagdarsuren, 1964&1983; Bold, 1973; Meyburg & Meyburg, 1983; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Nyambayar, 2004; Nyambayar & Fuller, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Reading *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Batbayar *et al.*, 2006&2006a; Dorjderem, 2006; Nyambayar *et al.*, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Gantulga *et al.*, 2010; Reading *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 14,000 - 20,000 mature individuals. Global breeding and resident ranges are estimated at 13,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder and partial migrant. Breeding birds build large stick nests of twigs, dried Caragana and other bushes in trees such as elm, poplar and birch, on cliffs, rocks on slopes and mountain tops and rock columns in mountain massif and slopes (Shagdarsuren, 1964&1983; Nyambayar, 2004; Nyambayar&Fuller, 2004; Bold *et al.*, 2005; Reading *et al.*, 2005; Batbayar *et al.*, 2006&2006a; Dorjderem, 2006; Nyambayar *et al.*, 2006; Enkh-Orshikh, 2007; Reading *et al.*, 2010; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). From early March to April, breeding pairs lay usually 1, rarely 2 (Nyambayar, 2004; Enkh-Orshikh, 2007; Reading *et al.*, 2010) eggs of dull white or buffish colour with grayish and reddish-brown blotches, spots and other markings. Parents incubate the eggs for 54-56 days. Both birds feed the chick(s) in the nest with carrion. Females stay and brood chicks in the nest longer than males (Paek *et al.*, 2006). Most nesting failures occurred during the approximately 55 day incubation period from March to early May. The chicks of breeding pairs nest in trees lived longer than the chicks raised in rocks, however they suffered higher mortality rates later in the nesting season such that overall fledging rates were similar. Vultures experienced a significantly lower success rate in 2003 (26.83%) and a significantly higher success rate in 2004 than other years in Ih Nart Nature Reserve (Reading *et al.*, 2010). According to satellite tracking studies of the vulture, home range sizes differ by regions: 310.3-1,315.2 km² (N=4) in (MCP 95%) in Hustai Nuruu National Park (Enkh-Orshikh, 2007), 603-7,548 km² (MCP 95%) in Ikh Nart Nature Reserve (Reading *et al.*, 2010). The daily movement distance of vultures in Hustai Nuruu National Park was 52.7-72.9 km minimum and 105.5-240 km maximum. Home range for two vultures varied by seasons: 1512 km² in June, 2142 km² in July, 2588 km² in August, 7,094 km² in September, and 3,609 km² in October (Enkh-Orshikh, 2007). After hatching, chicks leave the nest within about 100 days. Young birds move to wintering grounds by late September, depending on breeding success, food, weather conditions and threat factors. Between 2006-2009, 21 sightings of 21 individual tagged birds on 37 occasions were documented. Thirty three of the sightings (89%) came from South Korea between November and March. A tagged bird was also found in China in January and two birds in Yakutsk, Russia in July (Reading *et al.*, 2010). Most adult birds winter in Mongolia. According to migration studies, young vultures from Mongolia winter in South Korea, Nepal, possibly North Korea, and China.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. with rocky montains); 6. Rocky areas; 8. Desert (8.2., 8.3. on migration); 11. Artificial – Terrestrial (11.3. on migration and feeding).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock and is a cause of habitat degradation and disturbance to the pairs that nested low bushes and slopes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species in forest steppe.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near nesting areas are also major threats to the species.

1.7. Fires: Forest and steppe fires burn the tree and nest on slopes with nests in breeding habitats.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places. People use hind claws for a key holder. Local people shoot this species, confusing it with other eagles (Nyambayar, 2005).

4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir. Local herders shoot this species due to confusion with eagles in the steppe.

4.1.2.3. Poisoning: Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005). They scavenge poisoned and dead animals and get a dosage of chemicals through the food.

4.2. Collision -4.2.1. Pylon and building collision: Collided birds have been found underneath all types of power lines in Mongolia. Electrocuted birds have been found underneath 15 KV power lines (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

4.2.2. Vehicle collision: Feeding individuals near busy roads hit cars while taking off.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters- 7.3. Temperature extremes: High mortalities and nest failure occurred in the breeding pairs at early ages of development of eggs and chicks (Reading *et al.*, 2010).

8. Changes in native species dynamics- 8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. Carnivores such as Lynx (*Felis lynx*), Foxes (*Vulpes* sp.) (Reading *et al.*, 2010), Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) easily prey upon chicks in nests on slopes and low bushes.

8.3. Prey or food base: A lack of food in a breeding season may cause starvation of chicks, and low breeding success in general (Shagdarsuren, 1964&1983; Nyambayar, 2004; Nyambayar&Fuller, 2004; Reading *et al.*, 2005; Batbayar *et al.*, 2006&2006a; Dorjderem, 2006; Nyambayar *et al.*, 2006; Enkh-Orshikh, 2007; Reading *et al.*, 2010).

9. Intrinsic factors -9.2. Poor recruitment or reproduction and 9.3. High juvenile mortality is a potential threat to the species (Nyambayar, 2004; Reading *et al.*, 2005; Dorjderem, 2006; Nyambayar *et al.*, 2006; Reading *et al.*, 2010).

10. Human disturbance- 10.4. Transport: transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area (Nyambayar, 2004; Dorjderem, 2006; Nyambayar *et al.*, 2006; Enkh-Orshikh, 2007; Reading *et al.*, 2010).

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 12.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

96. Scientific Name: *Circaetus gallicus*

Species Authority: (Gmelin, 1788)

Common Names: Short-toed Snake-eagle or Short-toed Eagle (English), Mogoich zagalai or Iusch sar (Mongolian)

Subspecies in Mongolia: *C. g. heptneri*

Global Status: Least Concern

Regional Status: Endangered, D1.

Rationale for Assessment: This species has been assessed as Endangered, D1, because the population for Mongolia is estimated at less than 250 mature individuals. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009- Endangered, D1

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Portugal, Spain, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Zimbabwe, It is considered vagrant in Austria.

Regional Distribution: In Mongolia, an individual was found in the south-western Hentii during the breeding season (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stenzel *et al.*, 2005). It breeds in the Selenge River valley and migrates through Orkhon, Selenge, Tuul River valleys, and the western Hentii Mountain Range (Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). T.Stenzel and S.Gombobaatar photographed young birds in Khujaa Shaamar, Suhbaatar province in late July, 2000 (S.Gombobaatar pers. comm. and photographs). Prof. M.Stubbe and his team found one breeding pair with nest containing one egg at Zuun Khailaastai at 20 km SE of Tsogt-Ovoo sum of Ömnögobi province /44°21'N; 105°28'E/ on 01 July, 2004 and 03 July, 2007; a nest with a fledgling in elm tree at Shutegiin Bayangol of Ömnögobi province /43°54'N; 107°40'E/ on 08 August, 2009; a nest with one juvenile at Ööshiin Gobi of Ömnögobi province /43°42'N; 108°11'E/ on 24 July, 2005; a nest with one breeding adult at dry river bed of the Ööshiin Gobi of Ömnögobi province /43°42'N; 108°11'E/ on 24 July, 2005; a nest with one juvenile in elm tree at Bagd mod, SE Noyon sum of Ömnögobi province /42°50'N; 102°46'E/ on 07 July, 2007; a nest with one juvenile at Galbyn Gobi /42°36'N; 105°46'E/ on 7 July, 2007 and one juvenile at Galbyn Gobi /42°36'N; 105°46'E/ 26 July, 2007; a nest with one juvenile at Galbyn Gobi /42°35'N; 105°46'E/ on 12 July, 2007; a nest with one juvenile at Galbyn Gobi /42°40'N; 105°49'E/ on 01 July, 2007; a nest

with one juvenile at Galbyn Gobi /42°36'N; 106°43'E/ on 14 July, 2005; a nest with an egg at dry river bed, Bataagiin gol in Galbyn Gobi /42°35'N; 106°58'E/ on 15 July, 2005; a nest with a juvenile at dry river bed, Bataagiin gol in Galbyn Gobi /42°34'N; 106°57'E/ on 14 July, 2005; a nest with an infertile egg at dry river bed, Bataagiin gol of Galbyn Gobi /42°34'N; 106°57'E/ on 04 July, 2005; a nest with one juvenile at Galbyn Gobi /42°46'N; 107°47'E/ on 15 July, 2004 and 15 July, 2007; a nest with one juvenile at Galbyn Gobi /42°58'N; 108°33'E/ on 30 July, 2006 and one egg at Galbyn Gobi /42°58'N; 108°33'E/ on 30 July, 2006 (Stubbe *et al.*, 2010).

Population: The global population consists of 51,000 - 156,000 mature individuals. Global breeding and resident ranges are estimated at 13,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating birds arrive in breeding and summering sites by mid-April-early May. Breeding begins in late April-mid-May. Breeding pairs build a stick nest made of twigs and dried branches of bushes and tree in Elm trees in the Gobi Desert. Female lays one egg of smooth white colour. The female incubates the egg alone for 40-47 days and also broods its chick. The male hunts for snakes and lizards, and feeds the female and the chick in the nest. The young leave its nest at 70-75 days. On migration, individuals occur singly or in small loose groups of 3-4 individuals in open forest steppe, steppe and Gobi Desert. Summering and breeding birds leave the country for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 6. Rocky areas (on migration); 8. Desert (8.1., 8.2. with Gobi trees); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in trees and bushes near breeding sites is a cause of habitat degradation.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities in Gobi have directly and indirectly affected the species.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding sites in the Gobi Desert where the species breeds are major threats, causing the species to abandon the site.

1.7. Fires: Forest fires may burn trees with nests containing eggs and young hatchlings.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

7. Natural disasters-7.1. Drought: Due to the drought of the last few years, trees in breeding areas dried out and breeding birds have been losing their breeding, resting, roosting and refueling habitats in the country.

8. Changes in native species dynamics-8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

10. Human disturbance-10.4. Transport: Transport of cars and busy roads near tourist and mining camps have been negatively affecting individuals in the area.

Conservation Measures: Listed in CITES Appendix II. Approximately 11.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

97. Scientific Name: *Circus aeruginosus*

Species Authority: (Linnaeus, 1758)

Common Names: Western Marsh-harrier or Marsh Harrier (English), Namgiin khuld or namgiin tsagaan elegt (Mongolian)

Subspecies in Mongolia: *C. a. aeruginosus* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and tourism it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Congo, Sweden, Angola, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Republic of Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Cyprus, Malawi, Ethiopia, Kenya, Saudi Arabia, Jordan, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Singapore. It is regionally extinct in Ireland, Israel, Lebanon, and Luxembourg.

Regional Distribution: This species breeds at Uvs Lake (Northern Uvs Depression) and Khar-Us Lake (Great Lakes Depression). It migrates through these breeding areas, Achit and Uureg Lakes (Mongol-Altai Mountain Range) and occurs in dry open mountain and desert steppe in Bööntsagaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes) and Bulgan River (Baruunkhurai Depression) on migration. Eastern limit of its distribution is unclear. Breeding record for this species is also doubtful due to taxonomy (Kozlova, 1930; Tarasov, 1962; Piechocki, 1968; Bold, 1969; Mauersberger, 1979; Piechocki *et al.*, 1981; Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 500,000 - 2,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,500,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by mid-April-early May. Breeding season begins late April- mid-May. Some breeding records are still doubtful due to its taxonomical issues and mis-identification in the field by inexperienced researchers. The border of breeding limits of the species and Eastern Marsh-harrier is still unclear. Breeding pairs build a stick nest of reeds and dried grass on the ground in tall marsh vegetation and reed beds in the river and lake valleys (Bold *et al.*, 2005; Stubbe *et al.*, 2010; Gombobaatar, 2012). The female usually lays 4-5, sometimes 3-8 eggs of bluish white colour with small brownish spots. Incubation is 33-38 days. The female incubates the eggs and male carries food to the female and chicks. Male passes voles and small birds to the female in mid-air. The young leave the nest at 40 days. On migration, they occur singly, or in small loose groups of 2-3 individuals in open areas in the steppe and lake and river valleys. They leave Mongolia for wintering grounds by late August-early October (MNE & JICA, 2001).

Habitat Type: 4. Grassland (4.4. on migration and hunting); 5. Wetlands (inland) (5.3., 5.4. with reed beds, 5.9. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /in summer, livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species breeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, and tourist camps near the lakes where the species breeds are major threats to the species/-1.4.6. Dams /two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources/, 1.7. Fires /steppe fires may burn the reed beds and sedge grasses with nests, eggs and occasionally young/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2. Collision -4.2.1. Pylon and building collision /collision is a potential threat to the species/; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, wetlands with reed beds and sedge grasses have dried out and breeding birds have been losing important breeding, resting and roosting habitats in the country/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region prey upon chicks in the nest/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see at 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 8.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

98. Scientific Name: *Circus spilonotus*

Species Authority: Kaup, 1847

Common Names: Eastern Marsh-harrier (English), Dornyn khuld (Mongolian)

Subspecies in Mongolia: *C. s. spilonotus* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock,

mining and drought it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, China, Mongolia, Bangladesh, Myanmar, Cocos (Keeling) Islands, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Japan, Papua New Guinea.

Regional Distribution: This species breeds in river and lake valleys with tall reeds and sedge grass (Bold *et al.*, 2005; Stubbe *et al.*, 2010; Gombobaatar, 2012) in Onon, Balj Rivers (Hentii Mountain Range); Herlen and Ulz Rivers (Herlen-Ulz River basins), Khalkh, Nömrög and Azarga Rivers, Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, open habitats and river valleys in Khangai and Hövsgöl Mountain Ranges, Orkhon-Selenge valleys, Eastern Mongolian Plain, and Buir Lake-Khalkh River-Khyangan (Kozlova, 1930; Kleinstäuber & Succow, 1978; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Stubbe *et al.*, 2010).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding species. Breeding and migrating individuals arrive in their breeding and summering sites by mid-April-early May. Breeding begins in early May, and continues into August. This species nests on the ground in dense reed beds and tall sedge grasses in the lake and river valleys. Female lays 3-8 eggs of bluish white with small reddish-brown dots. The female incubates the eggs for 32-35 days and male delivers food to the female and chicks. . It feeds young on small rodents, birds, amphibians and insects for 40 days. On migration, individuals occur singly or in small groups in open areas in forest steppe, steppe, lake and river valleys and other type of wetlands. They leave the breeding site for wintering grounds by late August-early September (MNE & JICA, 2001).

Habitat Type: 4. Grassland (4.4. on migration and hunting); 5. Wetlands (inland) (5.3., 5.4. with reed beds, 5.9. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /in summer, livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species breeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, and tourist camps near the lakes where the species breeds are major threats to the species/-1.4.6. Dams /two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources/, 1.7. Fires /steppe fires may burn the reed beds and sedge grasses with nests, eggs and occasionally young/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1. / -4.1.2.3. Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning

in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /collision is a potential threat to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, wetlands with reed beds and sedge grasses have dried out and breeding birds have been losing important breeding, resting and roosting habitats in the country/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Raccoon Dog (*Nyctereutes procynoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region prey upon chicks in the nest/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see at 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 9.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

99. Scientific Name: *Circus cyaneus*

Species Authority: (Linnaeus, 1766)

Common Names: Northern Harrier, Hen Harrier, or Marsh Hawk (English), Saaral khuld or tsagaan elegt (Mongolian)

Subspecies in Mongolia: *C. c. cyaneus* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Jamaica, Columbia, Haiti, Bahamas, Venezuela, Turks and Caicos Islands, Dominican Republic, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Senegal, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Andorra, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Orkhon and Selenge Rivers (Orkhon-Selenge River basins); Onon and Balj Rivers (Hentii Mountain Range); Khalkh, Degee, Nömrög, Tsagaan Chuluut, Azarga Rivers and Buir, Shavar, Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region). It migrates through open areas in Mongol-Altai Mountain Range, Great Lakes Depression, Khangai and Hövsgöl Mountain Range, Darkhad Depression, Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, and Dzungariin Gobi (Kozlova, 1930&1932; Gagina, 1961; Tarasov, 1962; Shagdarsuren, 1964&1983; Dementiev & Naumov, 1966; Piechocki, 1968; Bold, 1969; Bold, 1973; Ivanov, 1976; Kleinstäuber & Succow, 1978; Mauersberger, 1978; Sergelen, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1988&1991; Sumiya & Skryabin, 1989; Dawaa *et al.*, 1994; Stephan, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). In winter the species occurs in lake and river valleys of steppe and desert steppe along Brandt's Vole colonies.

Population: The global population consists of 1,300,000 mature individuals. Global breeding and resident ranges are estimated at 29,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives in breeding site by mid-April-early May. Breeding begins in late April-early May. Breeding pairs build a stick nest on the ground made of reeds and dried grasses in open areas in river and lake valleys with reed beds and tall sedge grasses (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female lays 4-6, very rarely 8 eggs of bluish-white, rarely blotched with light brown. Eggs are laid at intervals of 2 or more days. Incubation is 29-39 days. Males occasionally breed with 2-3 females but this compels some females to hunt. The male brings food and passes it to the female in mid-air. Both male and female hunt small rodents such as voles, young gerbils, small birds and fledglings of passerines in open areas with short reeds and other vegetation. On migration, individuals occur singly or in small groups in open country. They leave their breeding and summering sites for wintering grounds by late August-early October, depending on food availability and weather conditions. Some individuals occur in lake and river valleys of the steppe and desert steppe near Brandt's Vole colonies in central and eastern Mongolia.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration and hunting

5. Wetlands (inland) (5.3., 5.4. with reed beds, 5.9. on migration); 11. Artificial – Terrestrial (11.2.).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /in summer, livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species breeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, and tourist camps near the lakes where the species breeds are major threats to the species/-1.4.6. Dams /two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources/, 1.7. Fires /steppe fires may burn the reed beds and sedge grasses with nests, eggs and occasionally young/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1. / -4.1.2.3. Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /collision is a potential threat to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./;

6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, wetlands with reed beds and sedge grasses have dried out and breeding birds have been losing important breeding, resting and roosting habitats in the country/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region prey upon chicks in the nest/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see at 1.7./.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

100. Scientific Name: *Circus macrourus*

Species Authority: (Gmelin, 1770)

Common Names: Pallid Harrier (English), Heeriin khuld or Kheeriin tsagaan elegt (Mongolian)

Global Status: Near Threatened

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown, however it is known to be less than 15,000 pairs. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Iceland, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Mali, Liberia, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Malta, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Palestinian Territory Occupied, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Afghanistan, Pakistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Malaysia, Japan, This species is regionally extinct in Latvia and Viet Nam and is of uncertain presence and origin in Bhutan.

Regional Distribution: The species passes through open country from Mongol-Altai east to Great Lakes Depression, Desert steppe depression in Zavkhan, Khangai and Hövsgöl Mountain Range and SW Hentii (Tuul River) on migration (Kozlova, 1930; Kleinstäuber & Succow, 1978; Kiefer *et al.*, 1984; Fomin & Bold, 1991; Dawaa *et al.*, 1994; MEN, 2001; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stubbe *et al.*, 2010).

Population: The global population consists of 18,000 - 30,000 mature individuals. Global breeding and resident ranges are estimated at 5,840,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown, compared with its population in 2000.

Habitats & Ecology: In Mongolia, this species is a summer visitor and passage migrant. There is no proof for its breeding in the country. It passes through the country by mid-April-early May (on spring migration) and by late August-early October (on autumn migration), depending on food availability and weather conditions. They inhabit open habitats with reed beds and tall grasses in lake and river valleys. Individuals migrate singly or in small groups consisting of 3-4 individuals in open steppe. It preys on amphibians, small birds, and small rodents, such as voles.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration and hunting); 5. Wetlands (inland) (5.3., 5.4. with reed beds, 5.9. on migration); 11. Artificial – Terrestrial (11.2.).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /in summer, livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species breeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near the lakes where the species breeds are major threats to the species/, 1.7. Fires /steppe fires may burn the reed beds and sedge grasses with nests, eggs and occasionally young/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.3. Poisoning /insecticide is a potential threat to the species on migration/, 4.2. Collision -4.2.1. Pylon and building collision /collision is a potential threat to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /Due to drought of the last few years, wetlands with reed beds and sedge grasses have dried out and breeding birds have been losing important breeding, resting and roosting habitats in the country/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see at 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 9.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

101. Scientific Name: *Circus melanoleucos*

Species Authority: (Pennant, 1769)

Common Names: Pied Harrier (English), Alag khuld or saaral tsagaan elegt (Mongolian)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown, however it is known to be less than 10,000–100,000 individuals. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species may breed in open lake and river valleys in the Herlen, Ulz and Khalkh Rivers. The species occurs in valleys of Herlen, Ulz, Khalkh, and Nömrög Rivers and oasis of the Trans Altai Gobi (Shagdarsuren, 1983; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold *et al.*, 1996; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Stubbe *et al.*, 2010). P.Gankhuyag photographed one nest with two eggs in reed beds at Zezeg Lake, 145 km SE of Ulaanbaatar city (47.00067°N; 108.20361°E) on 04 June, 2010 (P.Gankhuyag pers. comm.).

Population: The global population consists of 10,000 mature individuals. Global breeding and resident ranges are estimated at 2,090,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a rare breeding visitor. Most breeding and migrating individuals arrive in summering and breeding sites by mid-April-early May. Breeding begins in late April-early May (MNE & JICA, 2001). Breeding pairs build a stick nest of reeds and long dried grasses on the ground in dense and tall reed beds and marshes in lake and river valleys in the east. Female lays 4-5 eggs of bluish white colour with brownish spots and markings. Incubation is more than 30 days by female. The male hunts for terrestrial small rodents (voles, mice), amphibians and insects on the ground in open areas near breeding sites. The male brings the food to the female, passing the prey in mid-air to the female. After fledging, parents feed the young for a short period. On migration, individuals occur singly or in small groups (2-3). They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration and hunting); 5. Wetlands (inland) (5.3., 5.4. with reed beds, 5.9. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, and tourist camps near the lakes where the species breeds are major threats to the species/, 1.7. Fires /steppe fires may burn the reed beds and sedge grasses with nests, eggs and occasionally young/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1. / -4.1.2.3. Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /collision is a potential threat to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, wetlands with reed beds and sedge grasses have dried out and breeding birds have been losing important breeding, resting and roosting habitats in the country/; 8. Changes in native species dynamics-8.2. Predators /carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region prey upon chicks in the nest/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see at 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 11.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

102. Scientific Name: *Circus pygargus*

Species Authority: (Linnaeus, 1758)

Common Names: Montagu's Harrier (English), Nugyn khuld or nugyn tsagaan elegt (Mongolian)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown, however it is uncommon in Mongolia. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Congo, Sweden, Namibia, Czech Republic, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Bangladesh, It is regionally extinct in Slovenia.

Regional Distribution: This species is found in open areas of Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression) and Shishgid (Darkhad Depression) on migration (Bold, 1973; Rogatscheva, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Stubbe *et al.*, 2010).

Population: The global population consists of 100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: In Mongolia, this species is a summer visitor and passage migrant. Migrating individuals arrive and pass through the country by mid-April-early May (on spring migration), and by late August-early September (on autumn migration), depending on food availability and weather conditions (MNE & JICA, 2001). Individuals migrate singly or in small numbers. They are found in open country of river valleys and lakes. It hunts for small rodents, passerine birds, amphibians and insects.

Habitat Type: 4. Grassland (4.4. on migration and hunting); 5. Wetlands (inland) (5.3., 5.4. with reed beds, 5.9. on migration); 11. Artificial – Terrestrial (11.2.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /in summer, livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species breeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining /gold and other

mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / ecotourism development, human settlement, and tourist camps near the lakes where the species breeds are major threats to the species/, 1.7. Fires /steppe fires may burn the reed beds and sedge grasses with nests, eggs and occasionally young/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.3. Poisoning /insecticide is a potential threat to the species on migration/, 4.2. Collision -4.2.1. Pylon and building collision /collision is a potential threat to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /Due to drought of the last few years, wetlands with reed beds and sedge grasses have dried out and breeding birds have been losing important breeding, resting and roosting habitats in the country/; 10. Human disturbance-10.4. Transport /transport by boat and car near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see at 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 11.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

103. Scientific Name: *Accipiter badius*

Species Authority:(Gmelin, 1788)

Common Names: Shikra (English), Uursee khartsaga or uursesee khartsagai (Mongolian)

Subspecies in Mongolia: *A. b. cenchroides* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Mali, Liberia, Cote d'Ivoire, Burkina Faso, Ghana, Togo, Niger, Benin, Nigeria, Cameroon, Congo, the Democratic Republic of the Congo, Angola, Namibia, Chad, Central African Republic, South Africa, Botswana, Sudan, Zambia, Zimbabwe, Lesotho, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Eritrea, Iraq, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, This species is possibly regionally extinct in Azerbaijan.

Regional Distribution: B.Stephan (German ornithologist) observed a single individual near the tourist resort of Juulchin close to Dalanzadgad of Ömnögobi province 29 May, 1986 (Stephan, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; MNE & JICA, 2001; Bold & Mainjargal, 2006; Stubbe *et al.*, 2010).

Population: The global population consists of 1,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, the species is considered vagrant. It was recorded in southern Mongolia only once on spring migration. The species migrates through the country possibly by late April-early May (on spring migration) and late August-early September (on autumn migration) (MNE & JICA, 2011). According to MacKinnon & Phillipps (2000), and Ferguson-Lees & Christie (2001), this species feeds on large insects, frogs and lizards, more rarely on small birds and animals.

Habitat Type: Potential habitats are Forest (1.1., 1.4. only on migration); 3. Shrub-land (3.3., 3.4. only on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. with planted trees only on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/-1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to this breeding species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, and tourist camps near the forest where the species occurs, are major threats to the species/, 1.7. Fires /forest fires may burn habitats/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.3. Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning on migration/, 4.2. Collision -4.2.1. Pylon and building collision /collision is a potential threat to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, trees dried out in some areas in the country/; 8. Changes in native species dynamics-8.2. Predators /Eurasian Eagle-owl may prey upon individuals on migration/; 10. Human disturbance-10.4. Transport /transport of cars near tourist camps and busy roads have been negatively affecting the individuals/, 10.5. Fire / see 1.7./.

Conservation Measures: Listed in CITES Appendix II. The species possibly passes through protected areas and important birds areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

104. Scientific Name: *Accipiter gularis*

Species Authority: (Temminck & Schlegel, 1844)

Common Names: Japanese Sparrowhawk or Besra Sparrowhawk (English), Shungaach khartsaga or shungaach khartsgai (Mongolian)

Subspecies in Mongolia: *A. g. sibiricus*, *A. g. gularis* (see Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and drought, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, India, China, Mongolia, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Macao, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Guam, Northern Mariana Islands.

Regional Distribution: This species nests in coniferous and deciduous trees (Bold *et al.*, 2005; Gombobaatar, 2012) in forest and forest steppe from Tes River valley to east Khangai, Hentii, Hövsgöl Mountain Range, including Tuul River valley and east to the Bogd Mountain and Onon River valley. It may nest in the northern part of Ih Bogd (Gobi-Altai Mountain Range) and migrates through breeding areas and through the steppe and Gobi Desert. However, there is a lack of observations of its migration (Kozlova, 1930; Bold, 1969; Bold, 1973; Mauersberger, 1979; Mauersberger *et al.*, 1982; Vasilchenko, 1987; Stephan, 1988; Sumiya & Skryabin, 1989; Erdenebat, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2007; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 10,000 - 100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a rare breeding visitor. Breeding and migrating individuals arrive in summering and breeding sites by mid-April-early May. Breeding begins in late April-mid-May. Breeding pairs build a stick nest in coniferous and deciduous (poplar) trees in taiga forest, forest steppe and lake and river valleys with old deciduous and mixed trees. Female lays 4-6 eggs of bluish-white colour with reddish-brown spots and blotches. Incubation is 30-28 days. Mostly female incubates the eggs and male hunts small birds and very rarely small rodents in forest and river valleys. On migration, individuals occur singly or in small groups (2-3) in open areas with trees, bushes, rocks and cliffs and planted trees in towns and cities. Breeding and migrating birds leave the country for wintering grounds by late August-mid-September (MNE & JICA, 2001).

Habitat Type: Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. with trees on migration); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining/gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting/cutting of trees with nests is a potential threat to this breeding species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water/ecotourism development, human settlement, and tourist camps near the forest where the species breeds, are major threats to the species/, 1.7. Fires/forest fires may burn the forest with nests, eggs and occasionally young/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting/Arab falconers trap Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are very attractive to other birds of prey in the steppe. Entangled raptors such as Saker Falcon, Peregrine Falcon, Upland Buzzard, Steppe Eagle, Golden Eagle, and including this species (on migration), may die in the field/ -4.1.2.3. Poisoning/rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), and insecticides are causes of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision/collision is a potential threat to the species/; 5. Persecution -5.1. Pest control/see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic/domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought/due to the drought of the last few years, trees dried out in breeding sites in the country/, 7.3. Temperature extremes/eggs and chicks may overcool/; 8. Changes in native species dynamics-8.2. Predators/Eurasian Eagle-owl may prey upon adults and young birds in breeding period and on migration/; 10. Human disturbance-10.4. Transport/transport of cars near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire/see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 8.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

105. Scientific Name: *Accipiter nisus*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Sparrowhawk or Sparrowhawk (English), Morin khartsaga or morin khartsgai (Mongolian)

Subspecies in Mongolia: *A. n. nisosimilis* (see Howard & Moore (1994); Dawaa *et al.* (1994); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Iceland, Western Sahara, Mauritania, Gambia, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Niger, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Monaco, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, San Marino, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Republic of Moldova, Russian Federation, Tanzania, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Brunei Darussalam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species nests in coniferous and deciduous trees in forest and forest steppe (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Gombobaatar, 2012) near Buyant and Khovd Rivers (Mongol-Altai Mountain Range); Tes River (Tes River valley); Zavkhan and Hungui River with patchy birch trees (Desert steppe depression in Zavkhan); Khangai, Hentii, Hövsgöl Mountain Range, Herlen-Ulz River basins, Buir Lake-Khalkh River-Khyangan region. It migrates throughout Mongolia including Great Lakes Depression, Valley of the Lakes, Trans-Altai, N & W Eastern Gobi (Kozlova, 1932; Gagina, 1961; Shagdarsuren, 1964&1983; Bold, 1969& 1973; Bold, 1977; Stepanyan & Bold, 1983; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2008; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 1,500,000 mature individuals. Global breeding and resident ranges are estimated at 23,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in breeding and summering sites by late March - early April (MNE & JICA, 2001). Breeding begins in

late April–mid-May. Breeding pairs build a stick nest of dried twigs and branches in coniferous and rarely deciduous trees in taiga forest, forest steppe and in lake and river valleys with old deciduous and mixed trees. The female usually lays 3-4, sometimes 2-7 eggs of bluish to non-glossy white with dark reddish-brown spots, blotches, and markings. The female incubates the eggs for 32-42 days. The male hunts for various bird species and feeds the female and chicks. Both parents and young hunt small to medium sized birds such as tits, bunting, thrushes, rosefinches, etc., and rarely small rodents such as voles, pikas, chipmunks in forest and forest steppe. Individuals occur singly or in loose small groups of 3-9 individuals through open areas with trees, bushes, rocks and cliffs, sometimes planted trees in a village, town or city on migration. They leave the country for wintering grounds by late August–late September, depending on food availability and weather conditions.

Habitat Type: Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. with trees on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to this breeding species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, and tourist camps near the forest where the species breeds, are major threats to the species/, 1.7. Fires /forest fires may burn the forest with nests, eggs and young/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting /Arab falconers trap Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are attractive to other birds of prey in the steppe. Entangled raptors such as Saker Falcon, Peregrine Falcon, Upland Buzzard, Steppe Eagle, Golden Eagle and Northern Goshawk (on migration) may die in the field/- 4.1.2.2. Shooting /see 3.5.1. / -4.1.2.3. Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /electrocuted birds were found underneath 15 KV power line (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, trees dried out in breeding sites in the country/, 7.3. Temperature extremes /eggs and chicks may overcool/; 8. Changes in native species dynamics-8.2. Predators /Eurasian Eagle-owl may prey upon adults and young birds in breeding period and on migration (Tumurbat *et al.*, 1007&2009; Gombobaatar, 2006)/; 10. Human disturbance-10.4. Transport /transport of cars near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

106. Scientific Name: *Accipiter gentilis*

Species Authority: (Linnaeus, 1758)

Common Names: Northern Goshawk or Goshawk (English), Ulegkhartsaga or ulegkhartsagai (Mongolian)

Subspecies in Mongolia: *A. g. schvedowi*, *A. g. buteoides*, *A. g. albidus* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Republic of Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species nests in coniferous and deciduous forests in taiga, forest and forest steppe, and river valleys (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) particularly the upper Khovd River (Mongol-Altai Mountain Range); Khangai, Hentii, Hövsgöl Mountain Range, Orkhon-Selenge River basins, Herlen-Ulz River basins, Buir Lake-Khalkh River-Khyangan region. It migrates through the breeding areas and Northern Uvs Depression, Great Lakes Depression, Desert steppe depression in Zavkhan, Khan Höhii, Tarvagatai, Bulnai and Gurvansaikhan Mountains, Valley of the Lakes, and Eastern Mongolian Plain (Kozlova, 1930; Shagdarsuren, 1964&1983; Piechocki, 1968; Bold, 1969; Bold, 1973; Bold, 1977; Baumgart, 1978; Mauersberger, 1978; Piechocki *et al.*, 1981; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 500,000 mature individuals. Global breeding and resident ranges are estimated at 31,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a common breeding visitor and partial migrant. Breeding and migrating individuals arrive in Mongolia by mid-April-early May. Breeding season begins mid-May and continues into August. Breeding pairs build several stick nests in old coniferous and deciduous trees with dense leaves in a breeding site of the taiga forest, forest steppe and river valleys. They build the nest of twigs and dry branches, lined with softer and thinner plants and twigs. Female lays 2-5 eggs of bluish white, variably marked with dark brown spots. Incubation is 36-42 days. The female mostly incubates the eggs and male carries food to the female and chicks. Both adults feed young on small to medium sized forest birds and forest mammals such as Siberian Chipmunk (*Tamias sibiricus*), Red Squirrel (*Sciurus vulgaris*) and Long-tailed Ground Squirrel (*Spermophilus undulatus*) for 40 days. On migration, individuals occur in open habitats with trees, bushes, and rocky areas, sometimes in planted trees in urban areas. Most young birds migrate to the south. On migration, they prey on voles, gerbils and pikas. Breeding and migrating birds leave Mongolia for wintering grounds by late September-early November (MNE & JICA, 2001). Some adult birds winter in Mongolia.

Habitat Type: Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 6. Rocky areas (on migration); 8. Desert (8.2. with trees on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species through water pollution by heavy metals like mercury/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to this breeding species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /ecotourism development, human settlement, and tourist camps near the forest where the species breeds, are major threats to the species/, 1.7. Fires /forest fires may burn the forest with nests, eggs and occasionally young/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting /Arab falconers trap Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are very attractive to other birds of prey in the steppe. Raptors such as Saker Falcon, Peregrine Falcon, Barbary Falcon, Upland Buzzard, Steppe Eagle, Golden Eagle and Northern Goshawk (on migration) may die in the field/- 4.1.2.2. Shooting /see 3.5.1. / -4.1.2.3. Poisoning /rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision/electrocuted birds were found underneath 15 KV power line in the steppe (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution -6.2. Land pollution -6.2.2. Domestic /domestic land pollution is a possible cause of low species density associated with habitat change; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, trees dried out in breeding sites in the country/, 7.3. Temperature extremes /eggs and chicks may overcool/; 8. Changes in native species dynamics-8.2. Predators /Eurasian Eagle-owl may prey upon adults and young birds in breeding and on migration/; 10. Human disturbance-10.4. Transport /transport of cars near tourist camps and busy roads have been negatively affecting individuals in the area/, 10.5. Fire /see at 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

107. Scientific Name: *Butastur indicus*

Species Authority: (Gmelin, 1788)

Common Names: Grey-faced Buzzard or Grey-faced Buzzard Eagle (English), Sarjuu khartsgai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, China, Mongolia, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species has been observed at the Khonin nuga research station (49°05'22"; 107°17'44") of western Hentii Mountain Range (Wichmann, 2001; Tseveenmyadag *et al.*, 2005; Tseveenmyadag & Bold, 2006).

Population: The global population consists of 100,000 mature individuals. Global breeding and resident ranges are estimated at 1,830,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There is only one record in the country. However, this record is doubtful and needs to be proofed in future. It was found in coniferous and mixed forests in taiga forest. According to the record, this species possibly passes through the country by late April-early May (on spring migration) and by late August-early September (on autumn migration). It preys on insects, frogs, snakes, lizards and small rodents (Flint, 1984).

Habitat Type: Potential habitats are 1. Forest (1.1., 1.4.).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/, 4.2. Collision -4.2.1. Pylon and building collision /potential threat to the species on migration/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, the species migrates through some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

108. Scientific Name: *Buteo buteo*

Species Authority: (Linnaeus, 1758)

Common Names: Common Buzzard, Eastern Buzzard, or Eurasian Buzzard (English), Oin sar (Mongolian)

Subspecies in Mongolia: *B. b. vulpinus*, *B. b. japonicus* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and tourism it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Monaco, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, San Marino, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Japan, Northern Mariana Islands.

Regional Distribution: This species breeds in forest and forest steppe at Khangai, Hövsgöl and Hentii Mountain Range. The species occurs in breeding areas and also the Mongol-Altai Mountain Range, Great Lakes Depression, Eastern Mongolian Plain, Valley of the Lakes on migration (Molleson, 1906; Bianki, 1907; Tugarinov, 1929; Kozlova, 1930, 1932&1933; Gagina, 1961; Shagdarsuren, 1964; Shagdarsuren, 1983; Bold, 1969; Bold, 1973; Kleinstäuber & Succow, 1978; Matthes, 1986; Mauersberger, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stephan, 1994; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2002&2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 4,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding, migrating and summering individuals arrive in Mongolia by mid-April-early May. Breeding begins in late April- mid-May, depending on weather conditions. Breeding pairs build a stick nest in coniferous and rarely deciduous trees and cliffs in forest, forest steppe and lake and river valleys (Shagdarsuren, 1964&1983; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Gombobaatar, 2012). Female lays 3-6 eggs of a non-glossy white variably marked with reddish-brown and chestnut blotches, spots and variable markings. The eggs are incubated mostly by the female for 33-35 days. The male hunts for small rodents such as vole, young pika, mice, and insects, rarely birds and very occasionally lizards and feeds the female and chicks in the nest. Nestlings fledge at 40-45 days after hatching. After fledging, parent birds feed the young near breeding sites. Later they live independently from the adults. On migration, they occur singly or in small loose groups of 3-8 individuals. They soar high up and sometimes migrants are found in areas with trees, tall bushes, rocks and cliffs, very occasionally in planted trees. Breeding and migrating birds leave their summering and breeding site for wintering grounds by late August -mid-September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.4. hunting on rodents during the migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. on migration).

Dominant threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting

/cutting of trees with nests is a potential threat to the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats. Fires may burn nests with eggs and occasionally young/; 3. Harvesting-3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning/, 4.2. Collision -4.2.1. Pylon and building collision /collided birds were found under a pole of the 15 KV power line in Central Mongolia. This species is one of the most commonly electrocuted birds on 15 KV lines (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that are the main prey of the species/, 7.3. Temperature extremes /overcooling of eggs and young chicks in the nest during early breeding period/; 8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species. Predators such as Eurasian Eagle-owl prey upon both eggs and young in the nest/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

109. Scientific Name: *Buteo rufinus*

Species Authority: (Cretzschmar, 1827)

Common Names: Long-legged Buzzard (English), Talyn sar (Mongolian)

Subspecies in Mongolia: *B. r. rufinus* (see Howard & Moore (1994); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and tourism it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Morocco, Mali, Portugal, Spain, Algeria, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia,

Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Ukraine, Bulgaria, Belarus, Egypt, Turkey, Russian Federation, Tanzania, Uganda, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar.

Regional Distribution: One nest containing 3 chicks was found in Saxaul tree in Khongoryn els of Ömnögobi province in July, 2009 and two young birds were seen on Saxaul tree in N Khongoryn els of Ömnögobi province in August, 2010 (S.Gombobaatar and P.Amartuvshin pers. comm. and photographs). The species migrates along Tuul River, Northern Gobi, Valley of the Lakes, Zavkhan River valley, Bulnai Mountain (Kozlova, 1930; Bold, 1969; Shagdarsuren, 1964 & 1983; Kozlova, 1975; Piechocki *et al.*, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Stubbe *et al.*, 2010). It is also found at Middle Khalkh Steppe (Sergelen sum of Töv province; Mönkhkhaan sum of Sukhbaatar province; Airag sum of Dornogobi province) (S.Gombobaatar pers. comm. and photographs), Northern and Eastern-Gobi, Gobi-Altai Mountain Range, and the northern Trans-Altai Gobi. Birds were recorded in the Middle Khalkh Steppe area, following a high density vole colony (S. Gombobaatar pers. comm.).

Population: The global population consists of 100,000 mature individuals. Global breeding and resident ranges are estimated at 8,890,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. However, there is only one breeding proof in the south. The species arrives at breeding sites by mid-April-early May. Breeding begins in late April-mid-May. Breeding pairs build a stick nest of twigs, branches, and brush in Elm, Saxaul, and Poplar trees or cliffs. Female lays 2-5 eggs of non-glossy white to yellowish colour with reddish-brown spots and blotches. Both sexes, but chiefly the female, incubate the eggs for 28-30 days. The male hunts for rodents such as vole, gerbil, hamster, pika, and rarely birds. It brings them to the nest and feeds the female and chicks in the nest. After fledging, both parents feed fully grown young near nest site and disperse to areas where prey species numbers are high. On migration, individuals occur singly or in very loose groups in small numbers in desert steppe and forest steppe. They leave their breeding and summering sites for wintering grounds by early September -early October, depending on food availability and weather conditions.

Habitat Type: 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.1., 8.2., 8.3.).

Dominant threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in the steppe breeding habitats of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/, 1.7. Fires /Saxaul forest fires may burn breeding habitats. Fires may burn nests with eggs and occasionally young/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1.-Trapping and netting /Arab falconers have been trapping Saker Falcons in Mongolia using pigeons with loops made of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. This species may take these harnessed pigeons, become entangled in the loops and usually die in the steppe/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning/, 4.2. Collision -4.2.1. Pylon and building collision /collided birds were found under a pole of the 15 KV power line in Central Mongolia. This species is one of the most commonly electrocuted birds on 15 KV lines (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010;

Gombobaatar *et al.*, 2011)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that prey of the species/, 7.3. Temperature extremes /overcooling of eggs and young chicks in the nest during early breeding period/; 8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species. Predators such as Eurasian Eagle-owl, Steppe Eagle and Golden Eagle prey upon young/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. Approximately 12.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

110. Scientific Name: *Buteo hemilasius*

Species Authority: Temminck et Schlegel, 1844

Common Names: Upland Buzzard (English), Shiliin sar (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Islamic Republic of Iran, Kazakhstan, Uzbekistan, Tajikistan, India, China, Nepal, Mongolia, Bhutan, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Mongol-Altai, Gobi-Altai Mountain Range, Great Lakes Depression, Desert steppe depression in Zavkhan, Khangai, Hövsgöl, Hentii Mountain Range (except for taiga and above 3,000 m asl) and Middle Khalkh Steppe, Eastern Mongolia plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Northern and Eastern Gobi Depression depending on prey species abundance. The species occurs in the Trans Altai Gobi and neighbouring territories of Gobi-Altai on migration (Kozlova, 1930; Shagdarsuren, 1964&1983; Bold, 1969&1973; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008a; Odkhuu & Gombobaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Gombobaatar *et al.*, 2009 & 2010a,b; Reuven *et al.*, 2010; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 10,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a common resident breeder. However, some individuals, mostly young birds, might migrate to the south. They arrive in the breeding sites by late March - early April. Most adult birds winter near active Brandt's Vole colonies. Breeding season begins at the beginning of May and continues to July. Some breeding pairs have a second clutch per year depending on food availability (Gombobaatar *et al.*, 2008a & 2010a,b). Breeding pairs build nest on natural substrates (trees, cliffs, ground, rocks) and artificial or man-made substrates (roofs of abandoned buildings, cattle shelters, poles, pylons, deserted car cabins etc.) using twigs, bones, wool, and man-made materials such as wire, cable, pieces of metal, plastic bags, and cotton in forest steppe, mountain steppe, desert steppe and river valleys (Shagdarsuren, 1964&1983; Potapov *et al.*, 2001; Potapov *et al.*, 2002; Bold *et al.*, 2005; Odkhuu & Gombobaatar, 2008; Gombobaatar *et al.*, 2008a; Gombobaatar *et al.*, 2009; Sundev *et al.*, 2010; Gombobaatar *et al.*, 2010&2010ab; Reuven *et al.*, 2010; Stubbe *et al.*, 2010; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). According to Gombobaatar *et al.*, 2008a & 2010a,b, during the seven-year study they monitored a total of 304 breeding attempts (nests with at least one egg or nestling), in different natural zones including high mountains, forest, forest steppe, mountain steppe and desert steppe in Mongolia. In total, 52.63% of nests were placed on natural substrates (including the ground, 22.7%, $n = 69$; and natural elevated formations, 25.7%, $n = 78$). 47.36% of nests were placed on artificial nest platforms or human-related substrates. The average height of the substrate on which a nest was built was 5.1 m (± 8.0 m, range 0 - 34 m, $n = 269$). The height of nest locations above ground was 3.7 m (± 5.35 , 0 - 24, $n = 269$). Most open nests ($n = 91$, 60.3%) faced skywards and were considered as 360° (Fig. 3). Forty-seven (31.1%) nests faced east (between 1° and 180°) and 13 (8.6%) nests faced west (181° - 359°). The average outer diameter of the Upland Buzzard nest (\pm SD, range, n) was 908 mm (± 369 , 300 - 2000 mm, $n = 233$), internal depth of the nest cup was 51 mm (± 399 , 0-140 mm, $n = 214$), and external nest height was 317 mm (± 191 , 0-1800 mm, $n = 228$). Nest diameter was significantly influenced by the substrate on which it was placed. On natural substrates including the ground, the nest structure was bigger (1095 mm ± 34.5 , 45-2000 mm, $n = 114$) than those on human-built substrates (730.3 mm ± 298 , 300-1800 mm, $n = 119$). Nest materials found in the 304 nests included twigs of elm trees (*Ulmus pumila*), shrubs (*Caragana* spp.), animal hair, cotton, plastic bags, wires, cables, and other human-made materials. The proportions of different nest materials incorporated into the nests varied and were qualitatively associated with habitat type, surrounding vegetation, availability of materials, and proximity to urban areas. Nest materials in the nests near urban areas ($n = 15$) usually consisted of 80-90% wires, cables, plastic bags, strings, and twigs. Nests ($n = 289$) in remote areas consisted only of twigs, branches, roots, dried grasses, etc. Average clutch size for the 304 breeding attempts in the years 2001-2007 was 3.49 (± 1.09 , range 2-8); clutch size varied significantly among years. A total of 68 (22.4%) clutches failed to produce even a single hatchling. A total of 751 (70.8%) eggs hatched successfully. Of 304 breeding attempts, only two nests (0.7%) had 8-egg clutches, both in 2002. In one case we found a ground-nesting pair with five nestlings more than 20 day old, while the female concurrently incubated three eggs at the edge of the nest. We assumed that these three eggs were a late addition to the initial clutch. None of the eggs in the second clutch for either nest hatched. The average number of nestlings in the nest for our last check for 215 breeding attempts was 1.95 (± 1.53 , 0 - 6) in the breeding seasons of 2001-2007. Average clutch size, including second clutches in the same breeding season, was significantly higher for pairs that nested on natural substrates in comparison to human structures. The most frequent clutch size was 3 eggs for artificial nest substrate and 4 for natural substrates during our study. In addition, the average number of nestlings in the nests on natural substrates was significantly higher than that for artificial substrates. However, if we excluded artificial nest platforms from the analyses, then there was no difference in brood size between natural or artificial substrates. The advantage of a sheltered nest site was illustrated by the fact that although the average clutch size did not differ significantly between sheltered and unsheltered nests (sheltered 3.7 ± 1.4 , $n = 25$ vs. unsheltered 3.3 ± 1 , $n = 140$), the average number of nestlings in the nest was significantly greater in the sheltered nests (2.5 ± 1.4 , $n = 32$) than in the unsheltered nests (1.8 ± 1.4 , $n = 211$). An unusual case of a nest near a food source was observed after the extremely cold winter of 2002, when large numbers of cows and horses belonging to the local nomads died of starvation. In Central Mongolia, just before the onset of the breeding season of the Upland Buzzard, families removed dead cows from their cattle shelters and piled them up near their ger (tent) camps. In May, we found a pair incubating four eggs in

a nest placed atop a pile of 17 cow carcasses. Three young were successfully fledged from the nest. The adaptability of the species to the changing landscape of the Mongolian steppes was also demonstrated by the locations of other Upland Buzzard nests: in and atop abandoned cabins and vehicles. Another pair of Upland Buzzards built a nest on a gravel bank just 0.5 meters from the busy tracks of the Trans Baikal railroad; although incubation of three eggs occurred, no young fledged, because of disturbance from trains and railway workers. On another occasion, two nests with three young each were located 0.3 m from a dirt road. In addition, the proximity of prey species within the breeding territory also seemed to influence nest location. This apparently explained many of the unusual nest sites, use of artificial nest platforms, and the relatively high occupancy of nests on poles and pylons of the high-voltage electric line, telegraph poles, livestock shelters, and building ruins found in high density areas of Brandt's Vole and Mongolian Gerbils (Gombobaatar *et al.*, 2009). However, for the first time for this species, we documented two clutches of eight eggs. We believe that larger clutches are a function of prey availability. This was further substantiated by the fact that during periods of prey population irruptions we also observed nearly twice as many second clutches on natural substrates (Gombobaatar *et al.*, 2009). Gombobaatar *et al.* (2009) also found that Upland Buzzard pairs that reproduced successfully in a year of rodent abundance built their nests in the subsequent breeding season in the same areas. In early spring, food supply (i.e., voles and gerbils) was sufficient to sustain the breeding pair during nest-building and laying, because rodents that had successfully survived the harsh winter of the Mongolian steppes were active on the ground immediately after exiting wintering burrows or hibernation colonies (S. Gombobaatar unpubl. data). However, if inclement weather continued and transitioned into a harsh spring, rodents died *en masse* from starvation and extreme cold. For breeding Upland Buzzards, this resulted in nest abandonment, desertion of clutches and broods, increased incidence of starvation, and also cannibalism. Incubation is 28-35 days. Young birds leave the breeding site for wintering grounds by late September – mid-October, depending on breeding success, food, weather conditions and threat factors. Migration pattern of the species is still unclear for the country.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 5. Wetlands (inland) (5.4.); 6. Rocky areas; 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.1., 11.2., 11.3.).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock in the steppe breeding habitats of the species is a cause of habitat degradation associated with drought, 1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats. Fires may burn nests with eggs and occasionally young/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1.- Trapping and netting /Arab falconers have been trapping Saker Falcons in Mongolia using pigeons with loops made of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. This species may take these harnessed pigeons, become entangled in the loops and usually die in the steppe/- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tsevenmyadag *et al.*, 2005)/, 4.2. Collision -4.2.1. Pylon and building collision /collided birds were found under a pole of the 15 KV power line in Central Mongolia. This species is one of the most commonly electrocuted birds on 15 KV lines (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that are the main prey of the species/, 7.3. Temperature extremes /overcooling of eggs and young chicks in the nest during

early breeding period/; 8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species. Predators such as Eurasian Eagle-owl, Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) and Red Fox (*Vulpes vulpes*) prey upon both eggs and young in the nest. Eurasian Eagle-owl preys upon nestlings and adults at night (Gombobaatar, 2006; Tumurbat *et al.*, 2007&2009; Gombobaatar, 2006)/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. Approximately 9.0% of the species' range in Mongolia occurs within protected areas. In order to a support breeding success, building nesting substrates is a potential conservation measure of the species (Gombobaatar, 2006; Sumiya *et al.*, 2003; Munkhbayar *et al.*, 2004; Potapov *et al.*, 2003&2004; Gombobaatar *et al.*, 2005a; Munkhbayar *et al.*, 2005; Dixon *et al.*, 2008).

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

111. Scientific Name: *Buteo lagopus*

Species Authority: (Pontoppidan, 1763)

Common Names: Rough-legged Buzzard, Rough-legged Hawk (English), Tarlan sar (Mongolian)

Subspecies in Mongolia: *B. l. lagopus*, *B. l. menzibieri* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Iceland, Ireland, Spain, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Cyprus, Israel, Jordan, Lebanon, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Uzbekistan, Afghanistan, Tajikistan, China, Mongolia, Bhutan, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species is a winter visitor in open areas with thin snow cover and abundant food along Orkhon-Selenge River basins and Great Lakes Depression (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). Recently recorded in high density vole areas in Middle Khalkh Steppe (Bayan, Bayanjargalan, and Bayan-Önjuul sums of Töv province; Darkhan and Bayanmönh sum of Hentii province; Choir Mountain of Gobisumber province in January, 2003 & 2004; Tsagaandelger and Gobi-Ugtaal sums of Dundgobi province

in December, 2007 and 2008) (S.Gombobaatar pers. comm. and photographs). A single bird was recorded in Ih Nart Mountain of Gobisumber province (Boldbaatar, 2005).

Population: The global population consists of 500,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a winter visitor. Most migrants arrive in wintering sites where Brandt's Vole (*Lasiopodomys brandti*) number is high and active in thin snow in mountain steppe, Caragana steppe and north desert steppe by early October- early November, depending on weather conditions. They prey predominantly on Brandt's Vole and Mongolian Gerbil (*Meriones unguiculatus*) in eastern, central and western Mongolia. Individuals occur singly or in loose flocks of 3-6 individuals. They begin to move to the north by late February –early March, depending on food availability and snow cover.

Habitat Type: 3. Shrub-land (3.4. only on migration); 4. Grassland (4.1., 4.4. only on migration); 5. Wetlands (inland) (5.3., 5.4. on winter movement and only hunting in lake and river valleys); 6. Rocky areas; 11. Artificial – Terrestrial (11.2. only on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities including oil mining in eastern Mongolia have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/; 4. Accidental mortality-4.1.2. Terrestrial -4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that are the main prey of the species/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near feeding sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

112. Scientific Name: *Aquila clanga*

Species Authority: Pallas, 1811

Common Names: Greater Spotted Eagle (English), Bor burged (Mongolian)

Global Status: Vulnerable, C2a(ii)

Regional Status: Endangered, D1

Rationale for Assessment: This species has been assessed as Endangered, D1, because the population for Mongolia is estimated at less than 250 mature individuals. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009- Endangered

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Morocco, Ireland, Portugal, Spain, United Kingdom, Gibraltar, France, Belgium, Netherlands, Luxembourg, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Slovenia, Chad, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Serbia, Montenegro, Albania, Greece, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Afghanistan, Pakistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Macao, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan. Its presence and origin are uncertain in Mali and South Africa. It is native to but has uncertain presence in the occupied Palestinian territory. This species is possibly extinct regionally in Romania.

Regional Distribution: This species breeds in the taiga forest and forest steppe in Hentii Mountain Range, and in the basin of Eg and Selenge Rivers (Kozlova, 1930; Shagdarsuren, 1964&1983; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000 & 2005; Boldbaatar, 2003; Boldbaatar, 2005a & 2008). It was observed in breeding territories, Great Lakes Depression (Nyambayar & Tseveenmyadag, 2009) and Khalkh River basin on migration. It has been recorded near Ih Uul of Zavkhan of Tarvagatai Mountains in Khangai region, bordered by the Terkh River in the south and the Ider River in the north (a bird in July 1994) (Kováts *et al.*, undated); Ögii Lake (Arkhangai province) (two immature in May, 1998) (A. Bräunlich *in litt.* 1999); the Bayan-Ovoo of Bulgan of Erdenet route in August, 1993 (BirdLife International, 2001); between Hutag-Öndör and Airkhan Lake of Bulgan province (1 adult in July, 1996 (M. Köpman *per* A. Bräunlich *in litt.* 1999); Hentii Mountains (one bird collected in June c.1926, with very worn feathers and therefore unlikely to have bred that year in the vicinity) (Kozlova 1932); Bayangol valley near Mandal (W Hentii Mountain) (adult and juvenile in September, 1977) (Bankovics *et al.*, 1980); Kharaa River in SW Hentii Mountain (one bird collected in September, 1924) (Kozlova, 1932; BirdLife International, 2001); near Terelj (one individual in May, 1986) (Stephan, 1988); 45 km north of Atar in Töv province (one bird in July, 1996 (BirdLife International, 2001; Wichmann, 2001; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). It is regularly found in the valley of Onon and Balj River basins (Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 5,000 - 13,200 mature individuals. Global breeding and resident ranges are estimated at 12,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a very rare breeding visitor and passage migrant. Breeding and migrating individuals arrive in Mongolia by mid-April –early May. Breeding begins in late April–mid-May. Breeding habitats are lowland forests near wetlands, nesting in tall trees. Breeding pairs build large stick nests in coniferous and deciduous trees in taiga forest, forest steppe and river valleys with old mixed trees (Bold *et al.*, 2005; Stubbe *et al.*, 2010). They are comparatively conservative nesters. Female lays 2-3 eggs of a non-glossy greyish colour with sparse brown and greyish spots and blotches. Chiefly the female incubates the eggs for 42-44 days. Due to a lack of food, mostly only one chick survives in the nest. The male hunts for small to medium-sized mammals and rarely birds, on the ground or in the air. It delivers prey to the female and chicks in the nest. It also hunts for water birds, snakes and frogs. The young leave the nest at c. 60-65 days after hatching. On migration, the species occurs often singly in open forest steppe, lake and river valleys, and in areas with high rocks and cliffs. Breeding and migrating birds leave Mongolia for wintering grounds by late early September-early October, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 4. Grassland (4.4. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats, causing the species to abandon the site.

1.7. Fires: Forest fires burn trees with nests in breeding habitats. Fires may burn nests with eggs and occasionally young hatchlings.

4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: Arab falconers trap Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are very attractive to other birds of prey in the steppe. Raptors such as Saker Falcon, Peregrine Falcon, Barbary Falcon, Upland Buzzard, Long-legged Buzzard, Steppe Eagle, Golden Eagle, Northern Goshawk (on migration) entangle with these loops and eventually die in the field.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), and insecticides are causes of individual poisoning and low breeding success in breeding and non-breeding areas.

4.2. Collision -4.2.1. Pylon and building collision: Accidental mortalities by electrocution are a threat to the species.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)

6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Due to drought in forest steppe in the last few years, the number of rodents including Brandt's Vole and Ground Squirrel have crashed in the steppe associated with vegetation degradation.

8. Changes in native species dynamics-8.2. Predators: An increase in competitor and predator numbers also constitute threats to this species.

8.3. Prey or food base: In years with great abundance of prey (Ground Squirrels), the number of fledged young is generally high. During prey population crashes, cannibalism and siblicide often occur.

10. Human disturbance- 10.4. Transport: Car transport and busy roads have been negatively affecting the individuals that breed.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 12.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

113. Scientific Name: *Aquila nipalensis*

Species Authority: Hodgson, 1833

Common Names: Steppe Eagle (English), Tarvaji burged or Heeriin burged(Mongolian)

Subspecies in Mongolia: *A. n. nipalensis* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Mali, Spain, France, Niger, Nigeria, Netherlands, Norway, Germany, Italy, Tunisia, Denmark, Cameroon, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Chad, Poland, Croatia, South Africa, Hungary, Slovakia, Albania, Botswana, Greece, Finland, Sudan, Zambia, Ukraine, Estonia, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Swaziland, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Viet Nam, Singapore, Democratic People's Republic of Korea. It is regionally extinct in Republic of Romania, Bulgaria, Moldova.

Regional Distribution: This species breeds in forest steppe, mountain steppe, steppe, and desert steppe at the Mongol-Altai and Gobi-Altai Mountain Ranges (less than 2,500 m asl), Great Lakes Depression, Khangai, Hentii, Hövsgöl Mountain Range (except for deep forest and wetlands), Middle Khalkh Steppe, Eastern Mongolia Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Northern Gobi, and very rarely in the Trans-Altai Gobi and Eastern Gobi Depression. The species occurs in other areas on migration and when wintering. It migrates through the breeding areas and the Trans-Altai and Dzungariin Gobi (Przewalskii, 1876; Tugarinov, 1929; Kozlova, 1930&1932; Sushkin, 1938; Potanin, 1948; Pevtsov, 1951; Tarasov, 1960; Shagdarsuren, 1964; Dementiev&Shagdarsuren, 1965; Fischer, 1970; Bold, 1973; Shagdarsuren, 1983; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Ellis *et al.*, 1996; Boldbaatar, 1997; Bold&Boldbaatar, 1999a; Tseveenmyadag *et al.*, 2000 & 2005; Bold & Boldbaatar, 1999a; Ellis *et al.*, 1999 & 2001; Boldbaatar, 2002; Sumiya, 2002; Ellis, 2003; Boldbaatar, 2005, 2005a and 2008; Terbish & Gombobaatar, 2003; Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Gombobaatar *et al.*, 2007b; Nyambayar & Tseveenmyadag, 2009; Gantulga *et al.*, 2010; Gombobaatar *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). Breeding density depends on the population of Brandt's Vole (central and eastern Mongolia) and ground squirrels (western and northern Mongolia). After the breeding season, a high concentration of fledglings, second and third years, and adult birds occur on open water in the steppe and desert steppe (Gombobaatar *et al.*, 2007& 2008).

Population: The global population consists of 10,000 mature individuals (BirdLife International, 2011). According to the population estimate of Bold&Boldbaatar (1999a), a total of 1500-2000 breeding pairs of the Steppe Eagle inhabit Mongolia. Shagdarsuren (1964) found 5 active nests per 20 km². According to last 10 year surveys, a total of 655 were counted in some areas of Hövsgöl, Khovd, Hentii, Uvs, Suhbaatar, Töv, Övörkhangai, Zavkhan, Dundgobi, Dornod, Gobi-Altai, Bayankhongor, Bulgan and Arvaiheer provinces. More than 1,500-2,000 pairs breed in Mongolia in total (MNE & JICA, 2001).

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a common breeding visitor. It is a migratory species for the country (Bold&Boldbaatar, 1999). Adult eagles very occasionally stay near active Brandt's vole colony in the steppe until late November. Most breeding pairs arrive in breeding sites by mid-April-early May. Breeding season continues from May-July. Breeding pairs build large stick nests on natural (tree, cliff, rock boulder, rock column, ground) and artificial or man-made substrates (pole, car tire, roof of deserted building, artificial nest platforms etc.) (Shagdarsuren, 1964&1983; Ellis *et al.*, 1996, 1997 & 2001; Bold&Boldbaatar, 1999a; Ellis, 2003; Bold *et al.*, 2005; Gombobaatar *et al.*, 2007b; Gombobaatar *et al.*, 2010; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). A bird in apparent subadult plumage nested in Mongolia (Ellis, 2003). One of the individuals from four breeding pairs found in Central Mongolia was in subadult plumage like a second year bird. It is uncertain whether these birds are subadult birds or just pale individuals. According to Gombobaatar *et al.* (2010), a total of 7 different types of nest substrates were selected by the successful breeding pairs. Of the total of 49 nests evaluated, 22 (45.8%) were placed on the ground, 15 (32.6%) on rock columns and large boulders, 4 (8.7%) on cliffs, one on a tree (2.2%), and 4 (8.7%) on artificial substrates (2 on abandoned car cabins, 1 on a car tire and 1 on an artificial nest platforms). Breeding pairs preferred to place their

nest in the midst of 20-30 cm high rock platforms, or on crumbling rock columns 2-7 meters high, on top of hilly slopes overlooking active colonies of rodents, mostly Brandt's Vole (*Lasiopodomys brandti*). They rarely placed their nests on old, abandoned lorry cabins or car tires even when available within their territory. Only one artificial nest platform was occupied by a pair of Steppe Eagles from among 100 that were placed on the steppes in 2002. The eagle nests contained twigs of elm tree, shrubs (*Caragana* sp.), tail hair of horses and cattle, fur of sheep, goat and camel, cotton, plastic bags and other human-made materials. The percentage of the materials included in the nest varies and depends on habitat type, vegetation, cattle density, and distance from urban areas. The outer diameter of the nest was 1467 mm (± 46 SD, 60-250, n=34), nest depth 68 mm (± 4.4 , 0-14, n=33), nest height 256 mm (± 15.8 , 10-70, n=34). Occasional nestling mortality was caused by entanglement in the nest materials such as synthetic string and women's nylon stockings. Steppe Eagle pairs build 2 or 3 nests located close to each other on rock columns or raised outcrops and offering an elevated view of the surrounding flat steppe. Distance between these nests was between 260 - 300 m. No alternative nests were found if the pair built their nest on the ground. Average clutch size was 1.9 (± 0.6 eggs, 1-3, n=43) per breeding attempt. Egg colour is non-glossy white to yellowish with reddish-brown, dark brown spots and blotches. A total of 10 (23.3%) pairs laid only one egg, 25 (58.1%) laid 2 eggs, and 8 (18.6%) laid 3 egg clutches. The average number of young successfully fledged per breeding attempt was 0.89 (± 0.8 , 0-3, n=37). A total of 20 (40.8%) pairs fledged no young during the study; 15 pairs fledged one young, 6 pairs fledged 2 young, and 2 pairs fledged 3 young. Only 3 of the 10 1-egg clutches fledged successfully, 15 of the 2-egg clutches fledged at least one young, and five of the eight 3-egg clutches fledged young. It is of interest that pairs that laid only one egg had 30% breeding success as compared to 40% for 2-egg clutches, and 42% for 3-egg clutches. All these findings are similar to Shagdarsuren (1964, 1984) and Bold & Boldbaatar (1999) who found that clutch size varied from 1 to 3 eggs in Mongolia, and to Karyakin *et al.* (2003) who described the same average clutch size and fledglings in Altay Kray, Russia. Average hatching success was 54.8% (± 43.3 , 0-100, n=45) and fledging success was 42.2% (± 38.9 , 0-100, n=45). Hatching success ($65.1\% \pm 39$, 0-100, n=4) and fledging success ($50\% \pm 35.6$, 0-100, n=4) for cliff nesters was comparatively high and we assume that it is due to the locations being better sheltered from inclement weather, fewer disturbances from nomadic herders, and inaccessibility to the steppe predators. In contrast, hatching success ($37.5\% \pm 47.9$, 0-100, n=4) was always low for breeders on artificial substrates such as artificial nest platforms, car tires, and abandoned car cabins. Steppe Eagle in the Mongolian steppe prefers to build nests in areas of high vole density (Bold & Boldbaatar, 1999a; Gombobaatar *et al.*, 2005; Gombobaatar *et al.*, 2010&2010a,b). Bearing of nest locations was measured for each nest substrate. 79% of total observed nests were on top of rock columns and ground which are very open to see around the nest site. The scarcity of trees, rocky columns or outcrops on the Mongolian steppes force most of the Steppe Eagle pairs to nest on the ground or on very low bushes. Height of nests above surrounding areas was on average 2.28 m (± 4.7 SD, 0-25, n=38). All surveyed nests were located at an average altitude of 1415 m asl (± 275.3 SD, 1,100-2,429, n=46). We found no relationship between height of nest and clutch or brood size. The Steppe Eagle is capable of capturing and bringing to the nest a wide range of steppe species. The majority of the prey were mammals that included remains of Siberian Marmot (*Marmota siberica*), Corsac Fox (*Vulpes corsac*), Tolai Hare (*Lepus tolai*), Brandt's Vole, Long-tailed Ground squirrel (*Spermophilus undulatus*), Daurian Hedgehog (*Mesechinus dauuricus*), domestic goat (*Capra hircus*). Avian remains were of Skylark, Hoopoe, Mongolian Lark and Rock Dove. Bold&Boldbaatar (1999) found Daurian Partridge, Pallas's Sandgrouse, Japanese Quail, Mongolian Lark and beetles in its diet. Fledglings and migrants leave their breeding site for wintering grounds by late August-early October, depending on breeding success, food, weather conditions and threat factors. Individuals migrate singly to wintering grounds. On 28 July, 1995, D.Ellis and his team attached a satellite transmitter on a Steppe Eagle in Naran sum, Sukhbaatar province. The bird started to migrate on 12 October, 1995. They tracked the bird from the place where the transmitter was attached; it returned to the same place on 28 March, 1996. This bird migrated through E Dornogobi province and reached upper Yellow River and Mekong River, China. The bird flew over desert steppe and steppe and did not stop in large desert steppes (Bold&Boldbaatar, 1999a; Ellis *et al.*, 2001a).

Habitat Type: 1. Forest (1.4.); 4. Grassland (4.4.); 6. Rocky areas; 8. Desert (8.2. on migration); 11. Artificial - Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in the steppe is a cause of habitat degradation associated with drying process of the steppe.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding site are major threats to the species.

1.7. Fires: Steppe fires burn the nest on the ground in breeding habitats. Fires may burn nests with eggs and young hatchlings.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: Arab falconers trap Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are very attractive to other birds of prey in the steppe. Raptors such as Saker Falcon, Peregrine Falcon, Barbary Falcon, Upland Buzzard, Long-legged Buzzard, Steppe Eagle, Golden Eagle, Northern Goshawk (on migration) entangled with these loops eventually die.

4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir. According to Bold&Boldbaatar (1999a), local herders shoot this eagle because the eagles take young goats and lambs in spring.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Electrocuted and collided birds have been found underneath 15 KV power poles in Central Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: Due to drought in the steppe in the last few years, the number of seed eating birds and Brandt's Vole crashed in the steppe associated with vegetation degradation.

8. Changes in native species dynamics- 8.2. Predators: The low densities of predators, except Grey Wolf (*Canis lupus*), allows for greater breeding success on the steppes. Karyakin (2006) in Tuva found lower egg and nestling mortality in comparison to our study. This discrepancy can be explained by the location of the breeding territories of Steppe Eagle in Tuva which are in remote and inaccessible areas; whereas predation by Grey Wolf (*Canis lupus*) played a major role in nest failure. Also the very dispersed nature of the nomadic herders reduces disturbance to ground-nesting pairs, and it is possible that the ground nesters are phenotypically adapted for such behavior. Egg and nestling mortality were a result of desertion (N = 11, 36.7%), infertile eggs (N = 5, 16.7%), predation (N =2, 6.7%), starvation (N =3, 10%), cannibalism (N = 1, 3.3%) and unknown reasons (N=8, 26.7%). The majority of these occurred in ground-nesting pairs. On one of our visits we observed that while both the parent eagles were hunting at a distance of ca. 300 m from the nest, a Raven flew to the nest and left carrying an egg in its beak (Gombobaatar *et al.*, 2007b). Bold&Bolbdaatar (1999a) mentioned that Eurasian Eagle-owl, Golden Eagle, Cinereous Vulture, Upland Buzzard, Northern Raven, Grey Wolf (*Canis lupus*), Red Fox (*Vulpes vulpes*), Eurasian Badger (*Meles meles*), and Raccoon Dog (*Nyctereutes procyonoides*) are potential predators to the species.

8.3. Prey or food base: We found that on the Mongolian steppes prey availability influenced reproductive success in Steppe Eagles, and in years with greater prey abundance a greater number of young were

fledged. Increased prey density also influenced nest placement, and in areas of vole colonies eagles nested on the ground more frequently than in years of scarcity. During a season of prey population crash we observed cannibalism and siblicide. We found that pairs that nested on the ground were mostly situated in areas with a high density of Brandt's Vole in the spring. In years with harsh winters vole survival was extremely low and resulted in cannibalism and siblicide in the ground nesting Steppe Eagle pairs. We observed a parent eagle eating its chick near the nest after the number of Brandt's Vole crashed in the area. Bold & Boldbaatar (1999a) have previously found that siblicide was common during periods of low food supply.

8.5. Pathogens or parasites: One species of the cestods (*Cladotoenia fania* Meggitt, 1933) was found from the Steppe Eagle in Mongolia (Danzan, 1964).

10. Human disturbance-10.4. Transport: The disturbance to the nests in the proximity of busy roads, the smaller dimensions of the nest platform that limits nest size, and reduced prey abundance resulted in lower hatching success. The clutch desertion and egg and nestling mortality was most likely due to human or other mammalian predators. In May of 2003, we observed the desertion of freshly hatched and day-old siblings in a nest after a short visit of several local children to the nest.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.8% of the species' range in Mongolia occurs within protected areas. In order to support breeding success, building nesting substrates is a potential conservation measure of the species (Gombobaatar, 2006; Sumiya *et al.*, 2003; Munkhbayar *et al.*, 2004; Potapov *et al.*, 2003&2004; Gombobaatar *et al.*, 2005a; Munkhbayar *et al.*, 2005; Dixon *et al.*, 2008).

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

114. Scientific Name: *Aquila heliaca*

Species Authority: Savigny, 1809

Common Names: Eastern Imperial Eagle or Imperial Eagle (English), Khan burged (Mongolian)

Subspecies in Mongolia: *A. h. heliaca* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); Ferguson-Lees & Christie (2001) for further details)

Global Status: Vulnerable, C2a(ii)

Regional Status: Vulnerable, C2a(i)

Rationale for Assessment: This species has been assessed as Vulnerable, C2a(i), because the number of mature individuals in the largest subpopulation is less than 1,000 and the population is undergoing a continuing decline. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Morocco, France, Germany, Italy, Denmark, Cameroon, Libyan Arab Jamahiriya, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Serbia, Montenegro, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Lithuania, Sudan, Ukraine, Bulgaria, Belarus, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates,

Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan. It is native to, but has uncertain presence in Macao and the Occupied Palestinian Territory. It is a regionally extinct vagrant in Austria.

Regional Distribution: This species breeds at Hentii, and the Hövsgöl Mountain Range, particularly Orkhon and Selenge River basins in 1990 (Nyambayar & Tseveenmyadag, 2009; Stubbe *et al.*, 2010; Gombobaatar, 2012). It migrates through the breeding areas, open dry habitats, mountain slopes and forested areas near Altai city (Boldbaatar pers. comm.), and in Middle Khalkh Steppe, Eastern Mongolian Plain and the Bulgan River valley in Baruunkhurai Depression (Kozlova, 1930; Shagdarsuren, 1964 & 1983; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000 & 2005; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Nyambayar & Tseveenmyadag, 2009; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010), Khar-Us Lake, Khovd River valley Khovd province (a bird in August-October, 1996 (BirdLife International, 2001); Bulgan-gol, Baruunkhurai Depression (an individual in May, 1978 (Piechocki *et al.*, 1981); Dzavkhan unnamed locality (at c.49°N 96°E; a bird in July, 1992) (C. Bealey *in litt.* 1999; BirdLife International, 2001); Selenge River, undated (Fomin & Bold, 1991); near Khujirt **Övörkhangai** province (two birds in June, 1978 (Mauersberger, 1979); lower Orkhon River, Selenge province (a bird in June, 1972 (Mauersberger, 1979; Fomin & Bold, 1991), (breeding pair with one juvenile in July 1990, the only breeding record for Mongolia so far (Heidecke *et al.*, 1992); unnamed locality (at 50°01'N; 105°15'E) (BirdLife International, 2001); near the border with Russia, satellite-tracked juvenile in October, 1998 (BirdLife International, 2001); unnamed locality (at 49°25'N; 106°35'E), N Mongolia (satellite-tracked juvenile in October 1998; unnamed locality (at 48°55'N; 106°39'E), N Mongolia (satellite-tracked juvenile in October, 1998 (BirdLife International, 2001); unnamed locality (at 48°09'N; 107°03'E), near Ulaanbaatar (satellite-tracked juvenile in October 1998) (M. J. Ueta *in litt.* 1999; BirdLife International, 2001); near Turtle rock, Terelj area (a bird in August, 1984 (Kerr-Smiley, 1997 & 1998); unnamed locality (at 47°49'N; 108°18'E), E Ulaanbaatar (satellite-tracked juvenile in October, 1998; Sukhbaatar unnamed locality (46°25'N; 111°55'E), E Mongolia (satellite-tracked juvenile in October-November, 1998; unnamed locality (46°06'N; 111°45'E), E Mongolia (satellite-tracked juvenile in October-November, 1998; unnamed locality (45°56'N; 114°20'E), E Mongolia (satellite-tracked juvenile in October-November, 1998; unnamed locality (44°57'N; 113°15'E), E Mongolia near border with Inner Mongolia (satellite-tracked juvenile in October-November 1998 (M. J. Ueta *in litt.* 1999; BirdLife International, 2001). Satellite-tracking studies have shown that birds from the eastern Russian population migrate through Mongolia en route to China (BirdLife International, 2001). A breeding pair at Eg-Uur delta of Erdenebulgan sum /50°20'N; 102°00'E/ on 25 August, 2000 (Sh. Boldbaatar pers. comm.; Stubbe *et al.*, 2010); breeding pair with young birds at Hövsgöl /50°04'N; 100°13'E/ on 22 June, 2001 (S. Gombobaatar pers. comm.; Stubbe *et al.*, 2010); a breeding pair was found at Teshig River passing near old wheat fields in Eg River valley (Mainjargal, 2005); a nest with a chick in pine tree at Orkhon River valley /50°10'N; 106°10'E/ on 24 July, 1990 (Stubbe *et al.*, 2010).

Population: The global population consists of 5,200 - 16,800 mature individuals. Global breeding and resident ranges are estimated at 9,440,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating birds arrive in the country by late April-early May, depending on weather conditions. Breeding begins in late May-mid-June. Breeding pairs build a large stick nest made of branches and twigs, lined with long grasses and twigs in tall trees in coniferous and mixed forest in taiga forest, river valley and forest steppe (Bold *et al.*, 2005; Gombobaatar, 2012). Both adults, but chiefly female incubate 2-3 eggs of a non-glossy, white to pale buffish colour with brown and grey sparse markings for 43 days. Young vary in size, and the smaller usually dies due to sibling competition and a lack of food. First flight of the chicks will be at 60 days. Both sexes hunt small and medium-sized mammals including Long-tailed Ground Squirrel (*Spermophilus undulatus*), Daurian Ground Squirrel (*Spermophilus daurica*), Daurian Pika (*Ochotona daurica*) and occasionally small- and medium-sized birds. The female mostly broods

chicks in the nest. The male brings the prey and feeds the female and chicks in the nest. The chicks leave the nest when they reach 60 days old. The young remain near breeding sites and are still fed by parents after fledging. On migration, individuals occur singly in open habitats from forest steppe to desert steppe. They begin to migrate to wintering grounds by late early September-late October. It is possibly a wintering species because a single bird was recorded in Khan uul of Binder sum in Hentii province in February of 1987 (MNE & JICA, 2001).

Habitat Type: 1. Forest (1.4.); 4. Grassland (4.4.); 6. Rocky areas; 8. Desert (8.2. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats, causing the species to abandon the site.

1.7. Fires: Forest fires burn trees with nests in breeding habitats. Fires may burn nests with eggs and occasionally young hatchlings.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Several bird species, including this species, are collected and stuffed for display in public service places.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: Arab falconers have been trapping Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are very attractive to other birds of prey in the steppe. Raptors such as Saker Falcon, Peregrine Falcon, Barbary Falcon, Upland Buzzard, Long-legged Buzzard, Steppe Eagle, Golden Eagle, Northern Goshawk (on migration) entangle with these loops and eventually die in the field.

4.1.2. Terrestrial-4.1.2.2. Shooting: People occasionally shoot it for display as a stuffed souvenir.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), and insecticides are causes of individual poisoning and low breeding success in breeding and non-breeding areas.

4.2. Collision -4.2.1. Pylon and building collision: Potential threat will be a collision.

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)

6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Due to the drought of the last few years, deciduous and coniferous trees at important sites have been drying out and the number of rodents including Long-tailed Ground Squirrel (*Spermophilus undulatus*), Daurian Ground Squirrel (*Spermophilus daurica*) and other voles have been crashing in the forest steppe associated with vegetation degradation.

8. Changes in native species dynamics-8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species. Also see 7.1.

10. Human disturbance- 10.4. Transport: Busy roads have been negatively affecting the individuals that breed.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix I. Approximately 11.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

115. Scientific Name: *Aquila chrysaetos*

Species Authority: (Linnaeus, 1758)

Common Names: Golden Eagle (English), Tsarmyn burged (Mongolian)

Subspecies in Mongolia: *A. c. daphanea*, *A. c. canadensis*, *A. c. chrysaetos*, *A. c. kamtschatica* (see Wild Bird Society of Japan (2000) and Ferguson-Lees & Christie (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Western Sahara, Mauritania, Morocco, Mali, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Serbia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Syrian Arab Republic, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kyrgyzstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bhutan, Democratic People's Republic of Korea, Republic of Korea, Japan. It is a regionally extinct vagrant in Ireland and is regionally extinct in Lebanon.

Regional Distribution: This species breeds at Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression (mountain slopes, cliffs), Khangai, Hentii, Hövsgöl Mountain Range (except for wetlands, dense forest, human settlement), Middle Khalkh Steppe, Eastern Mongolia Plain (rocky mountains, mountain slopes with rocks, dried river banks), Buir Lake-Khalkh River-Khyangan region, Dzungariin Gobi (Bulgan River valley), Trans-Altai Gobi (mountain massif), Northern Gobi and the Eastern Gobi Depression (rocky slopes). The species occurs in most areas of the country during non-breeding periods (Berezovskii, 1881; Molleson, 1908; Tugarinov, 1929; Kozlova, 1930; Sushkin, 1938; Tarasov, 1960; Shagdarsuren, 1964; Piechocki *et al.*, 1968&1981; Sergelen, 1986; Bold, 1973; Shagdarsuren, 1983; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Shagdarsuren & Nyambayar, 1999; Nyambayar & Bold, 1999; Ellis *et al.*, 2000; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000 & 2005; Boldbaatar, 2002, 2005 & 2005a; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Tseveenmyadag & Bold, 2005; Gombobaatar *et al.*, 2006 & 2007; Nyambayar & Tseveenmyadag, 2009; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010).

Population: The global population consists of 170,000 mature individuals. Global breeding and resident ranges are estimated at 41,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. They stay all year around and hold the breeding territory. Breeding birds build several large stick nests in a single breeding territory. The nests are placed on top of rock boulders 1-3 m tall in the steppe, and broken rocks on hillsides of 1 m height in the steppe, on trees, cliff ledges, sandy precipices in high mountains, forest steppe, mountain steppe, steppe, and desert steppe (Shagdarsuren, 1964&1983; Nyambayar & Bold, 1998; Shagdarsuren & Nyambayar, 1999; Ellis *et al.*, 2000; Potapov *et al.*, 2001; Potapov *et al.*, 2002; Bold *et al.*, 2005; Gombobaatar, 2006; Gombobaatar *et al.*, 2006 & 2007; Munkhzaya & Gombobaatar, 2007; Stubbe *et al.*, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding season continues late March-early August. The female usually lays 1-2, rarely 3-4 eggs of a non-glossy, white colour with brown, chestnut or reddish-brown and pale grey spots, blotches and markings. Both female and male, but mostly female incubates the eggs for 43-45 days. 4 eggs and 4 chicks were found in W Mongolia on 25 May, 1975 (Piechocki *et al.*, 1981). The small size of males gives them an advantage in successful hunting. It hunts for small and medium-sized mammals, such as Brandt's Vole (*Lasiopodomys brandti*), Mongolian Gerbil (*Meriones unguiculatus*), Mongolian Marmot (*Marmota sibirica*), Tolai Hare (*Lepus tolai*), Corsac Fox (*Vulpes corsac*), Red Fox (*Vulpes vulpes*), and birds (young Saker Falcon, Daurian Partridge, Rock Dove, Chukar, young Demoiselle Crane). Nyambayar & Bold (1999) reported that this eagle feeds on young Goitered Gazelle or Black-tailed Gazelle (*Gazelle subgutturoza*), and Saiga Antelope (*Saiga tatarica*). They also attack White-tailed Gazelle and Mongolian Gazelle (*Procapra gutturoza*) (Tsagaan, 1989). Snakes are also in the species' diet (Piechocki *et al.*, 1981). The chicks leave the nest at 63-70 days. Duration of fledging depends on food, weather conditions and threat factors. After the young leave the nest, the parents feed the young near breeding sites. In winter, they remain near nesting sites and feed on carrion. In the field, we have seen young Golden Eagles scavenging dead gazelles, horses, sheep and goats in the steppe.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 6. Rocky areas; 8. Desert (8.3.).

Dominant Threats: 1. Habitat loss and degradation -1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Cutting of trees with nests is a potential threat to this breeding species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats, causing the species to abandon the site.

1.7. Fires: Forest fires may burn trees with nests, eggs and occasionally young hatchlings. According to Nyambayar & Bold (1999), fire is the worst threat to the species.

3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Golden Eagle breeders (Kazakh people) take chicks from nests and trap young eagles in Western Mongolia. This is a cause of a decrease of the eagle in western Mongolia. Kazakh people bred more than 300 Golden Eagles as falconry birds in Mongolia in 2001 (MNE & JICA, 2001). Immature Golden Eagles are caught in traps for Grey Wolf (*Canis lupus*) and Red Fox (*Vulpes vulpes*) in the steppe. Local people in the steppe shoot this Eagle in spring due to predation of young goats and lamb. Nyambayar & Bold (1999) also mentioned these factors.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: Arab falconers trap Saker Falcons in Mongolia using pigeons with loops of fishing line on their backs. If target birds do not take the pigeons with loops, the pigeons are simply left in the field. The harnessed pigeons are very attractive to other birds of prey in the steppe. Raptors such as Saker Falcon, Peregrine Falcon, Barbary Falcon, Upland Buzzard, Long-legged Buzzard, Steppe Eagle, Golden Eagle, Northern Goshawk (on migration) entangle with these loops and eventually die in the field.

4.1.2. Terrestrial-4.1.2.2. Shooting: People who want to make a stuffed souvenir or use claws for souvenirs occasionally shoot it.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual poisoning and low breeding success in breeding and non-breeding areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Electrocuted and collided birds have been found

underneath 15 KV power poles in Central Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution -5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic: Domestic land pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Due to drought in the steppe in the last few years, the number of rodents and hares such as Brandt's Vole, Mongolian Marmots and Tolai Hare have crashed in the steppe associated with vegetation degradation. This is a cause of low breeding success and phenomenon of siblicide.

8. Changes in native species dynamics-8.2. Predators: An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

8.3. Prey or food base: A crash of the prey species such as Mongolian Marmot, Tolai Hare, and Ground Squirrel influenced reproductive success in Steppe Eagles, and in years with greater prey abundance a greater number of young were fledged.

10. Human disturbance-10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species as disturbance factors.

10.4. Transport: Transport of cars and busy roads near breeding sites have been negatively affecting the individuals that breed there (Shagdarsuren & Nyambayar, 1999).

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

116. Scientific Name: *Hieraetus fasciatus*

Species Authority: (Vieillot, 1822)

Common Names: Bonelli's Eagle (English), Kharsun burgedei or kharsun burged (Mongolian)

Subspecies in Mongolia: *H. f. fasciatus* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Synonym: *Aquila fasciatus*

Taxonomical Notes: *Spizaetus africanus* and *Hieraetus fasciatus* (Sibley & Monroe, 1990&1993) have both been transferred into *Aquila*, also following Haring *et al.* (2006); and *H. kienerii* (Sibley & Monroe, 1990&1993) has been transferred into the resurrected genus *Lophotriorchis*. The BirdLife Taxonomic Working Group is aware that phylogenetic analyses have been published which have proposed moving *H. fasciatus* into *Aquila* but as not all published studies are concordant we prefer not to take a decision this until cladogenesis of the 'Booted Eagles' has been resolved.

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Mauritania, Morocco, Portugal, Spain, Algeria, Gibraltar, France, Belgium, Netherlands, Luxembourg, Germany, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Serbia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Bulgaria, Egypt, Turkey, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong.

Regional Distribution: In Mongolia, E.N.Kurochkin found a bird at Khan Bogd sum of Ömnögobi province on 03 September, 1987 (Kurotschkin, 1992; MNE & JICA, 2001; Bold & Mainjargal, 2006; Stubbe *et al.*, 2010).

Population: The global population consists of 10,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There are only two records of the species in Mongolia. This species possibly passes through the areas April-early May (on spring migration) and late August-early September (on autumn migration), as do other migrants. This species inhabits forested areas. On migration individuals occur in open habitats in desert steppe and high mountains. This eagle takes large prey items, usually mammals and birds. Mammals up to the size of a hare are regularly taken, and birds up to medium size (Ferguson-Lees & Christie, 2001).

Habitat Type: Potential habitats are 1. Forest (1.1., 1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 6. Rocky areas.

Dominant Threats: Potential threats to the species follow:

1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to the species/,
- 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near feeding sites are major threats to the species/,
- 1.7. Fires /forest and steppe fires may burn habitats/;
4. Accidental mortality-4.1.2. Terrestrial-4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide are a potential cause of individual poisoning/,
- 4.2. Collision -4.2.1. Pylon and building collision are potential threats to the species/;
5. Persecution -5.1. Pest control /see 4.1.2.3./;
6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/;
7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that are the main prey of the species/;
8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species/;
10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/,
- 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. Migrants pass through protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

117. Scientific Name: *Hieraaetus pennatus*

Species Authority: (Gmelin, 1788)

Common Names: Booted Eagle (English), Bakhim burgedei or bakhim burged (Mongolian)

Subspecies in Mongolia: *H. p. harterti*, *H. p. milvoides* (see Howard & Moore (1994) and Ferguson-Lees & Christie (2001) for further details)

Synonym: *Aquila pennatus*

Taxonomical Notes: *Spizaetus nanus*, *S. lanceolatus*, *S. philippensis*, *S. pinskeri*, *S. nipalensis*, *S. alboniger* and *S. bartelsi* (Sibley & Monroe, 1990&1993) and *S. cirrhatius* and *S. floris* (Gjershaug *et al.*, 2004) have been transferred into the genus *Nisaetus* following Haring *et al.* (2006). *S. africanus* and *Hieraaetus fasciatus* (Sibley & Monroe, 1990&1993) have both been transferred into *Aquila*, also following Haring *et al.* (2006); and *H. kienerii* (Sibley & Monroe, 1990&1993) has been transferred into the resurrected genus *Lophotriorchis*. The BirdLife Taxonomic Working Group is aware that phylogenetic analyses have been published which have proposed moving *H. pennatus* into *Aquila* but as not all published studies are concordant we prefer not to take a decision this until cladogenesis of the 'Booted Eagles' has been resolved.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and human disturbance it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Senegal, Western Sahara, Mauritania, Gambia, Morocco, Sierra Leone, Mali, Liberia, Portugal, Spain, Algeria, Cote d'Ivoire, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Germany, Switzerland, Italy, Tunisia, Cameroon, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Zambia, Ukraine, Bulgaria, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Singapore.

Regional Distribution: This species breeds in Khovd River valley; breeding pairs in poplar tree at 4 km north of Bulgan sum on 30 April, 1985 and at 5 km north of Bulgan sum on 19 April, 1988 (Stubbe *et al.*, 2010) (Bulgan River valleys); Kharkhiraa and Turgen Mountains; one breeding pair at Dayan Lake 28 June, 1980 (Mongol-Altai Mountain Range) (Fomin & Bold, 1991); Bulnai Mountain Range; two juveniles in larch tree at Tsetserleg /47°30'N; 101°27'E/ on 24 June, 2007 and one juvenile in larch tree at Tsetserleg /47°30'N; 101°25'E/ on 24 June, 2007 (K.Schleicher pers. comm.; Stubbe *et al.*, 2010) (Khangai Mountain Range); one egg in larch tree at Iree tal, N Bornuur on 23 April and 17

August (Kleinstäuber & Succow, 1978); a nest in pine tree at Bogd uul near Ulaanbaatar (Mauersberger, 1979); two juveniles in larch tree at Tuul River /47°59'N; 107°12'E/ on 02 July, 2003 (N.Batsaikhan pers. comm.; Stubbe *et al.*, 2010); one juvenile at Modonbulag am at Högnökhaan Mountain 30 July, 2000 (Sh. Boldbaatar pers. comm.; Stubbe *et al.*, 2010) (Hentii Mountain Range). It migrates through Hövsgöl (two birds collected at Dood Tsagaan Lake, Darkhad Depression 25 August, 1936 & 1962) (Sumiya & Skryabin, 1989), Khangai; Hentii Mountain Range and Gobi-Altai, Trans-Altai Gobi (Kozlova, 1930; Shagdarsuren, 1964 & 1983; Bold, 1973; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Boldbaatar, 2002, 2005 and 2005a; Terbish & Gombobaatar, 2003; Sumiya, 2002; Tseveenmyadag *et al.*, 2005; Gantulga *et al.*, 2010; Stubbe *et al.*, 2010; Usukhjargal *et al.*, 2010). A single bird of light morph was hunting at Ereen Khavirga of Erdenesant Mountain (Nyambayar *et al.*, 2005). Two breeding pairs were observed at Övör zaisan of Bogd Mountain near Ulaanbaatar (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 10,000 - 100,000 mature individuals. Global breeding and resident ranges are estimated at 7,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in summering and breeding sites by mid-April-early May. Breeding begins in late April-mid-May. Breeding pairs build a large stick nest in coniferous tree in taiga forest, forest steppe and lake and river valleys with old coniferous and mixed forest (MNE & JICA, 2001; Bold *et al.*, 2005; Stubbe *et al.*, 2010; Gombobaatar, 2012). Female lays 1-2 eggs of a non-glossy white, variably marked with brown, very faint at times. The female incubates the eggs alone. In breeding season, single adult birds soar and hunt rodents in open areas near forest steppe and forest. The male hunts for rodents such as vole, Daurian Pika (*Ochotona daurica*), Long-tailed Ground Squirrel (*Spermophilus undulatus*), small and medium-sized birds and feeds the female and chicks in the nest. On migration, individuals occur singly, in pairs, or in small loose groups of 2-3 individuals near forest and forest steppe. Breeding and summering birds leave their summering and breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 6. Rocky areas; 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat loss and degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/ -1.3.3. Wood- 1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /cutting of trees with nests is a potential threat to the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation /ecotourism development, human settlement, and tourist camps near breeding and feeding sites are major threats to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats. Fires may burn nests with eggs and occasionally young/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide are a potential cause of individual poisoning on migration/, 4.2. Collision -4.2.1. Pylon and building collision are potential threats to the species/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.2. Land pollution -6.2.2. Domestic / domestic land pollution caused by mining and industrial activities is one of the potential threats to the species/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation of steppe habitats caused a decrease in numbers of seed-eating birds and rodents that are the main prey of the species/, 7.3. Temperature extremes /overcooling of eggs and young chicks in the nest during early breeding season/; 8. Changes in native species dynamics-8.2. Predators /an increase in number of competitors and predators and a decrease in food base also constitute threats to this species; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near breeding and feeding sites of the species have been negatively affecting the species/, 10.5. Fire /see 1.7/.

Conservation Measures: Listed in CITES Appendix II. Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Falconiformes

Family: Accipitridae

118. Scientific Name: *Nisaetus nipalensis*

Species Authority: (Hodgson, 1836)

Common Names: Mountain Hawk-eagle or Hodgson's Hawk-eagle (English), Uulyyn sogsootburged (Mongolian)

Subspecies in Mongolia: *S. n. orientalis* (see Dawaa *et al.* (1994) and Wild Bird Society of Japan (2000) for further details)

Taxonomical Notes: This species used to belong to *Spizaetus* genus. *Spizaetus nanus*, *S. lanceolatus*, *S. philippensis*, *S. pinskeri*, *S. nipalensis*, *S. alboniger* and *S. bartelsi* (Sibley & Monroe, 1990&1993), *S. cirrhatus* and *S. floris* (Gjershaug *et al.*, 2004) have been transferred into the genus *Nisaetus* following Haring *et al.* (2006). *Nisaetus nipalensis* was split into *N. nipalensis* and *N. kelaarti* by Gjershaug *et al.* (2008), but this treatment is not followed by the BirdLife Taxonomic Working Group (Nov. 2008), because the authors present comparisons involving small samples that include contradictory ageing of the specimens in question, invalidating conclusions drawn about taxonomic differences that may merely be an artifact of different age classes. The BirdLife Taxonomic Working Group feel that, before a considered decision about a change in the taxonomic status of *kelaarti* can be made, a far larger sample size of same-age and same-sex specimens of the two taxa needs to be examined for plumage differences, that extensive tape-recordings should be systematically assembled and analyzed, and that broad photographic evidence could also usefully be assembled for comparisons (BirdLife International, 2011).

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, Hong Kong, Republic of Korea, Taiwan, Japan.

Regional Distribution: This species has been observed near Tuul River valley of the Songino uul, Ulaanbaatar (Dawaa *et al.*, 1994).

Population: The global population consists of 10,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. J.Lee observed a single bird in the Tuul River valley of the Songino uul near Ulaanbaatar city on 14 June 1993 (Dawaa *et al.*, 1994, Bold & Boldbaatar 1999; MNE & JICA, 2001; Bold & Tseveenmyadag, 2002; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). Only one individual was seen near deciduous and mixed forests in the country. This record is doubtful due to lack of documentation. It inhabits dense deciduous and mixed forests. It feeds on small mammals, birds and reptiles (Grimmett *et al.*, 1999).

Habitat Type: Potential habitats are 1. Forest (1.1., 1.4.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining, 1.3.3. Wood-1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting; 1.4. Infrastructure development-1.4.1.

Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation; 6.1. Atmospheric pollution-6.1.1. Global warming ; 10. Human disturbance-10.1. Recreation and tourism-10.4. Transport-10.5. Fire.

Conservation Measures: Listed in CITES Appendix II. This species possibly passes through protected areas such as Bogd Khaan, Khan Hentii and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Otididae

119. Scientific Name: *Otis tarda*

Species Authority: Linnaeus, 1758

Common Names: Great Bustard (English), Khonin toodog or toodog (Mongolian)

Subspecies in Mongolia: *O. t. dybowskii* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Global Status: Vulnerable, A3c

Regional Status: Vulnerable, A2(acd); C2a(i)

Rationale for Assessment: This species has been assessed as Vulnerable, C2a(i), because the number of mature individuals in the largest subpopulation is less than 1,000 and the population is undergoing a continuing decline. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable, C2a(i)

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Morocco, Ireland, Portugal, Spain, Gibraltar, Belgium, Netherlands, Luxembourg, Germany, Italy, Austria, Malta, Croatia, Hungary, Slovakia, Montenegro, Serbia, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Ukraine, Bulgaria, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Tunisia, Lebanon, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Pakistan, Tajikistan, Kyrgyzstan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan. It is a regionally extinct vagrant in Myanmar and is regionally extinct in Algeria, United Kingdom, France, Switzerland, Denmark, Sweden, and Poland. It has uncertain presence and origin in Czech Republic, Afghanistan, and Syrian Arab Republic.

Regional Distribution: This species breeds at Khovd River valley, northern Uvs Lake and Tes River valley; westernmost Achit Lake; from Tes River to the east through Northern Khangai to Hövsgöl Lake (Sumiya & Skryabin, 1989); from Eg River valley to Orkhon-Selenge River valleys and Suhbaatar town (Selenge province); Ögii Lake (two birds in June, unspecified year, Piechocki, 1968); through the Western Hentii (Mandal, Kharaa River valleys) to the upper Herlen and Onon River valleys (Khurkh, and Barkh Rivers); along Ulz River valleys; Khalkh, Nömrög River valleys and Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan range); Bulgan River valley (Baruunkhurai Depression-three females collected (all with brood-patches or eggs in May, unspecified year, BirdLife International, 2001). It migrates through the breeding range and Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan, Tes, upper Orkhon and Selenge Rivers and Sangiin Dalai and Ögii Lakes (two males, one in the Orkhon valley c.20 km NW of Khujirt and the other 41 km north of Khujirt in June, 1980) (Mauersberger *et al.*, 1982) (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid and Dood Lake wetlands (Darkhad Depression); Zelter River (Selenge province) (Batdelger, 1998); Barkh River, Batshireet sum, Hentii province (Bold 1997); Ulz River of Norovlin sum in Hentii province (Batdelger, 1998); Khurkh River of Binder sum in Hentii province (Bold, 1997; Batdelger, 1998); Mongol Daguur Strictly Protected Area (a rare breeding bird) (Tseveenmyadag, 1998); Middle Khalkh Steppe; Eastern Mongolia plain;

lowlands of the Gobi to the foothills of Gurvansaikhan Mountains (6 birds in June and August, 1979 and one in June, 1980) (Mauersberger *et al.*, 1982); Herlen, Khalkh River, Buir Lake and Menengiin tal of Dornod province (Bold, 1997; Batdelger, 1998); Nömrög Strictly Protected Area (a rare breeding bird) and Eastern Mongolian Strictly Protected Area (a rare breeding bird) (Tseveenmyadag, 1998); Bulgan River valley (Dzungariin Gobi); Northern Gobi and W Eastern Gobi (Kozlova, 1930; Piechocki, 1968; Bold, 1973; Kozlova, 1975; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold, 1997; Goroshko&Tseveenmyadag, 2000; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; BirdLife International, 2001; Bold & Tseveenmyadag, 2001; Tseveenmyadag, 2001; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Tseveenmyadag, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Nyambayar &Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). A pair with 2 young birds, one pair with a fledgling, and one pair with 3 young birds in Khurkh-Huiten valley of Hentii province on 22 August in 2004; two birds were seen in the desert steppe, 10 km SW of the Bulgan sum of Ömnögobi province, and 25 birds were photographed in the valley, located 15 km SW of Ömnödelger sum of Hentii province on 16 September, 2010 (S. Gombobaatar pers. comm. and photographs). It breeds at Bulgan tal and Rashaant wheat field of Hövsgöl province, and Selenge-Teel valley of Bulgan province. In June and July of 2011, Mongolian and Korean field teams found a total of 8 breeding pairs with 2-3 eggs, and 22 adult males in Rashaant wheat field (S.Gombobaatar pers. comm. and photographs). It winters in wheat fields at Orkhon, Selenge and Herlen River valleys depending on snow coverage and food source availability (Tseveenmyadag, 2001).

Population: The global population consists of 45,000 mature individuals. Global breeding and resident ranges are estimated at 2,350,000 km² (BirdLife International, 2011). In Mongolia, total population is 1,000 individuals (Bold & Tseveenmyadag, 2001). Later, N.Tseveenmyadag estimated total population of the species in Mongolia at 1,500-1,700 individuals based on data from 1961 (Tseveenmyadag, 2001; Tseveenmyadag, 2003). The Great Bustard in the Dauria is estimated as 1,050 birds, up to 66% of the global population (Goroshko, 2002).

Regional Population Trend: Decreasing.

Habitats & Ecology: For Mongolia, it is a breeding and partial migrant species. Migrants arrive in the breeding sites by late April–early May, depending on weather conditions. Wintering birds move to breeding sites at this time. Breeding season continues from May–July, sometimes till September. They inhabit open steppe with *Stipa* sp. grasses, river valleys, meadows, forest edges steppe, and wheat fields in winter. By early May, males of breeding pairs begin to display in breeding areas. Great Bustard males become sexually mature at four to five years of age, while females are known to have bred at just one year of age. Sometimes, from a long distance, the male looks just like a white animal moving around the female. This species nests on the ground, in shallow scrapes with gravelly soil and sparse tall grasses, rarely in soft sandy soil in vegetated fields in forest steppe, steppe and river valleys (Goroshko & Tseveenmyadag, 2000; Bold & Tseveenmyadag, 2001; Tseveenmyadag, 2003; Bold *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar, 2012). The female lays 2-3 (exceptionally 4) eggs of pale grey, greyish–olive, greenish, olive-brown, olive-green colour with large light brown and dark brown or grey blotches. The female incubates the eggs alone for 25-29 days. After they hatch, broods leave the nest. The female leads the chicks and feeds them at first. The male does not help the female with incubating or brooding. But they soon can find their own food. After 30 to 35 days, the fledglings are able to fly. According to Tseveenmaydag (2001), the egg laying and incubation are dependent on steppe fires and weather conditions of the year. This species eats insects such as beetles, grasshoppers, and other arthropods, and seeds, leaves, flowers, stems, wheat grains, occasionally mice, young fledglings of small birds, lizards, and frogs. One male bustard was shot at Lun sum, Töv province on 12 May, 1992. There were 24 grams of plant remains (roots, seeds, stems and leaves of *Poa* spp., *Alium* spp., and other plants) and 3 grams of animal remains (ant *Lasius niger* (2 inds.), *Tipula* sp. (2 inds.), grasshoppers *Oedaleus decorus* (2 inds.), *Angaracris rhodopa* (1 ind.), *Bryodema gebieri* (4 inds.), Brabyporidae (3 inds.), *Deracantha onos* (1 ind.), and beetles Tenebrionidae (9 inds.) and Curculionidae (13 inds.) in the intestine and stomach of the individual (Namkhaidorj, 2002). It winters in wheat fields at Eg and Uur (Teshig bridge, Khongor bridge, wheat fields in valleys of these rivers at Khantai, Teshig, Tarialan sums), Orkhon, Selenge, Khurkh, and Herlen River valleys and Lag Lakes depending on snow coverage and food availability (Tseveenmyadag, 2001; Boldbaatar, 2006). In 1998-2002, from 1 to 69

(10, 23, 31, 11, 8, 48-69, 21 individuals) wintering birds were recorded at Hishig-Öndör and Sharkhiin Adag of Bulgan province. Some wintering populations were regularly observed in the wheat field (Tseveenmyadag, 2003). Migrants leave the breeding site for wintering grounds by late September-mid-October (Tseveenmyadag, 2001), depending on food availability, weather conditions and disturbances. Habitat Type: 4. Grassland (4.4.); 5. Wetlands (5.4. dry areas); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. wheat fields in winter).

Dominant Threats: 1. Habitat Loss and Degradation- 1.1. Agriculture-1.1.1. Crops-1.1.1.2. Small-holder farming: Habitat loss and degradation is caused by the planting of wheat and other agricultural plants (potatoes, cabbage etc.) in open wide steppe where the species breed.

1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in river valley, open dry steppe, wetlands, and marshes is a cause of habitat degradation associated with desertification (Tseveenmyadag, 2003).

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected breeding success of the species at rivers and lakes contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats to the species. Due to overgrazing and human settlement at Ereen Tolgoi in Tengeleg River valley and Balj River valley, no breeding pairs have been seen for the last 16 years.

1.7. Fires: Steppe fires may burn breeding habitats along river valleys, open steppe and forest steppe in spring and autumn. Early spring and summer fires may burn nests with eggs and young broods. A dominant threat is steppe fire (Chan & Goroshko, 1998; Goroshko & Tseveenmyadag, 2000; Bold & Tseveenmyadag, 2001; Tseveenmyadag, 2001; (Tseveenmyadag, 2003).

3. Harvesting (hunting or gathering)-3.1. Food-3.1.1 Subsistence use or local trade: Local people hunt this species all year round for its meat, considered a delicacy within the country.

3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Local owners of wheat fields along Ulz and Khurkh River valleys occasionally shoot this species to flush them from the fields. Some people used to shoot this species for display in public places.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.

4.1.2.3. Poisoning: One of the dominant threats is the chemicals in Mongolia (Chan & Goroshko, 1998; Goroshko & Tseveenmyadag, 2000; BirdLife International, 2001; Bold & Tseveenmyadag, 2001; Tseveenmyadag, 2001; Tseveenmyadag, 2003). Rodenticide, like Bromadilone used against of Brandt's Vole (*Lasiopodomys brandti*) at breeding and feeding site of the species, is a threat to breeding and migrating birds throughout the area.

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations. In May of 1998, we found a dead bird underneath a telegraph line in Delgertsogt sum of Dundgobi province.

5. Persecution-5.1. Pest control: Pesticide and rodenticide in open steppe and forested areas against insects and rodents are potential threats to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)- 6.1.1. Global warming: Presumably due to warming, many suitable breeding habitats have been drying out in N & NE Mongolia.

6.2. Land pollution-6.2.1. Agriculture-6.2.2. Domestic: Caused by agriculture, overgrazing, and tourism, breeding and feeding areas contain trash like plastic bags and machine parts.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing breeding, resting and refueling habitats in Mongolia.

7.2. Storms or flooding-7.3. Temperature extremes: Sand storms, cold rains and sudden temperature drops are threats to the species, especially young chicks with pins. Sudden drops of air temperature and snow cover are dangerous and deadly factors for wintering birds in N&NW Mongolia.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*), Steppe Eagle and Golden Eagle in the region prey upon the eggs, flightless and slow-moving chicks.

8.3. Prey or food base: Thick snow cover may cause immature and young wintering bustards to starve.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

9. Intrinsic factors-9.2. Poor recruitment or reproduction-9.3. High juvenile mortality: A potential threat facing the species in Mongolia is slow population recovery associated with poor reproduction and high mortality of juveniles.

10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities besides tourism development that pose a threat to this species' breeding areas include mining, haymaking, flooding and increased frequency of steppe fires.

10.4. Transport: Transport by boat, car and horse near breeding areas have negatively affected breeding and non-breeding individuals. In recent years, local herders hay sedge grasses along lakes and river valleys, where sedges grow taller and denser than other plants. Where this disturbance is frequent, breeding birds might lose habitat and leave the areas.

10.5. Fire: Fires also cause habitat destruction at nesting sites and can rapidly decimate nesting pairs. See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997) and included in the Red Books of Russia and China. Hunting this species has been prohibited since 1980. Included in CITES Appendix II. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 6.1% of the species' range in Mongolia occurs within protected areas. Distributed areas are included in the Important Bird Areas in Mongolia.

Global level: CMS Appendix I and II and CMS MoU in place since 2002. EU Wild Birds Directive Annex I, Bern Convention Annex II, Bonn Convention Annex I. A European action plan was published in 1996 and an action plan for East Asian populations in 1998.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Otididae

120. Scientific Name: *Chlamydotis undulata*

Species Authority: (Jacquin, 1784)

Common Names: Houbara Bustard or Macqueen's Bustard (English), Joroo toodgoi or joroo toodog (Mongolian)

Taxonomical Notes: *Chlamydotis undulata* (Sibley & Monroe, 1990&1993) was split into *C. undulata* and *C. macqueenii* by several authors (Sangster, 1996; Sangster *et al.*, 1999; Knox *et al.*, 2002; Gombobaatar, 2009). However, following review of the most comprehensive summary of differences between the two taxa by Gaucher *et al.* (1996), Taxonomic Working Groups including the BirdLife International reject this treatment because reported differences are small and there remains uncertainty over the consistency of differences between the two taxa. With more evidence on fully consistent ethological differences across the ranges of the two forms, this may change (BirdLife International, 2010). Several bird checklists, published in Mongolian, have not separated these subspecies (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Batsaikhan *et al.*, 2005; Bold *et al.*, 2005&2007).

Global Status: Vulnerable, A2bcd+3bcd

Regional Status: Vulnerable, C

Rationale for Assessment: This species has been assessed as Vulnerable. The population size is unknown but may qualify for a threat category, therefore until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable, C.

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Mauritania, Morocco, Portugal, Spain (Canary Is.), Algeria, United Kingdom, France, Belgium, Netherlands, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Sweden, Czech Republic, Slovenia, Poland, Malta, Slovakia, Greece, Romania, Finland, Latvia, Sudan, Ukraine, Egypt, Russian Federation, Cyprus, Israel, Saudi Arabia, Palestinian Territory Occupied, Jordan, Lebanon, Syrian Arab Republic, Iraq, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bhutan, It is regionally extinct in Turkey.

Regional Distribution: This species breeds at Dundsaikhan Mountain of Ömnögobi province (43°45'N; 103°52'E) (a female and one chick on 17 June, 1945); Ih Bogd Mountain of Bayankhongor province (45°07'N; 100°17'E) (a pair with a chick on 26 June, 1945) (Bannikov, 1948); Byaruukhain spring in Borzon Gobi (42°30'26.8"N; 105°12'52.2"E) (a female with two chicks on 20 July, 1987) (M.Stubbe & R.Samiya pers. comm.; Batsaikhan, 2005); and Suman Khairhan, W Dooloon Khooloi (44°31'N; 97°42'E) (six pairs with five chicks on 12 August, 2001) (B.Mijiddorj pers. comm.; Batsaikhan *et al.*, 2005). It migrates through the breeding areas and Tsagaan Bogd /47°27'N; 92°25'E/ (two individuals) on 29 August, 1899 (Kozlov, 1948); Shar Dersnii Us /42°54.196' N; 98°55.56'E/ (two birds, presumably a pair) on 30 July, 1943; at Khyargas Lake /49°10'N; 92°51'E/ (two individuals) on 20 August, 1944; Dörgön Lake /47°33'N, 93°29'E/ (three individuals) on 25 August, 1944; Bööntsagaan Lake, E Taishir-Serh /45°44'N, 98°10'E/ (two individuals) on 08 July, 1945; Böhmörön River, Achit Lake /49°31'N; 90°23'E/ (three individuals) on 31 July, 1945); Khovd River, 30 km from Khovd town /48°12'N; 91°56'E/ (an individual) on 06 August, 1945; Botgon river /46°54'N; 92°29'E/ (three individuals) on 10 August, 1945; Tsetseg lake valley /46°34'N; 93°17'E/ (three individuals) on 12 August, 1945; Sharga Gobi /46°13'N; 94°35'E/ (4 individuals) on 13 August, 1945 (Bannikov & Skalon, 1948); Bulgan sum of Ömnögobi province /44°13'N; 103°30'E/ (a male) on 26 May, 1962) (collection of MAS); Bulgan sum of Khovd province /46°06'N; 91°21'E/ (five individuals) on 20 May, 1964 (Bold, 1965); Gobi Gurvansaikhan of Ömnögobi province (an individual), on 27 May, 1964 (Piechocki, 1966); Bulgan sum of Ömnögobi province /44°06'N; 103°27'E/ (3 individuals) 05 June, 1969 (Mauersberger, 1980); Ar Hödöö in Zuungobi of Uvs province /49°57'N; 93°18'E/ (a male) on 11 May, 1974 (collection No 2680, MAS) (Batsaikhan *et al.*, 2005); Erdeneburen sum of Khovd province /48°30'N; 91°27'E/ (a male) on 22 July, 1976 (collection No 3060 MAS; Batsaikhan *et al.*, 2005); 50 km E Khovd town /47°46'N, 91°59'E/ (an individual) on 19 August, 1980 (Piechocki *et al.*, 1981); 10 km away from Lun sum of Töv province /47°56'N; 105°15'E/ (an individual) on 17 September, 1982 (Mey, 1988); Nariin Us of Tar river in Ulaangom /50°06'N; 92°06'E/ (a female) on 18 May, 1985 (N. Tseveenmyadag pers. comm.; Batsaikhan *et al.*, 2005); Bayanzag of Ömnögobi province /44°11.863'N, 103°42.316'E/ (a male) on 17 July, 1987 (Stephan, 1994); Sonduult brigad, E Darvi mountain range /46°31'N, 95°17'E/ (two individuals) on 26 June, 1988 (S. Dulamtseren pers. comm.; Batsaikhan *et al.*, 2005); Tsagaan Duulalt bulag /44°58'N; 96°37'E/ (a single individual) on 12 September, 1993 (B.Mijiddorj pers. comm.; Batsaikhan *et al.*, 2005); Böhmörön River of Uvs province /49°47'N; 90°10'E/ (six individuals) on 27 July, 1998 (B.Chimed-Ochir pers. comm.; Batsaikhan *et al.*, 2005); Binder Lake of Binder sum in Hentii province /48°27.401'N; 110°17.572'E/ (an individual) in June, 1999 (B.Chimed-Ochir pers. comm.; Batsaikhan *et al.*, 2005); 30 km NW of Böhmörön sum of Uvs province /49°51'N; 90°10'E/ (12 individuals) on 08 June, 2002; Aj Bogd /44°36'N; 95°42'E/ (two individuals) on 18 June, 2000 (Sh. Boldbaatar pers. comm.; Batsaikhan *et al.*, 2005); Zarman Gobi /44°48.747'N; 97°19.507'E/ (an individual) on 16 June, 2001; Borzon Gobi (42°32.404'N; 105°11.388'E (two individuals) on 19 July, 2001; Borzon Gobi /42°30.580'N; 105°16.719'E/ (two individuals) on 19 July, 2001; Borzon Gobi of Ömnögobi province /42°30.148'N; 105°12.339'E/ (two individuals) on 28 June, 2002 (Batsaikhan *et al.*, 2005); Tsagaan Burgas oases /45°14.012'N; 97°56.056'E/ (two individuals) on 13 August, 2002; S Zarman Huren Tsav /44°50'N; 97°15'E/ (four individuals) in May, 2002 and 2003; Arts Bogd of Ömnögobi province /44°07'N; 103°20'E/ (one individual) on 10 May, 2003 (A.Bold pers. comm.); Tsagaan Burgas oases /45°14'01.2" N; 97°56'05.6"E/ (an individual) on 27 July, 2003 (B.Mijiddorj pers. comm.; Batsaikhan *et al.*, 2005); Takhi Us in Dzungar Gobi /45°29'N; 92°34'E/ (one individual) on 10 August, 2003 (D.Lkhagvasuren pers. comm.; Batsaikhan *et al.*, 2005); Umdain River of Khanbogd sum in Ömnögobi province /42°49'51.2"N; 106°58'46.2" E/ (a single bird) on 11 September,

2003 (A.Bold pers. comm.; Batsaikhan *et al.*, 2005); Noyon sum of Ömnögobi province /42°45.391'N; 103°03.393'E/ (one bird) on 23 September, 2003; Noyon sum /43°03.781'N; 102°17.164'E/ (a single individual) on 23 September, 2003; Noyon sum /42°53.349'N; 099°35.340'E/ (one individual) on 25 September, 2003; Noyon sum of Ömnögobi province /42°52.859'N; 100°12.206'E/ (an individual) on 26 September, 2003; Manlai sum of Ömnögobi province /43°58.631'N; 107°08.514'E/ (a bird) on 07 October, 2003; Zeergent valley of Ömnögobi province /42°28'04.2"N; 106°16'39.7"E/ (two birds) on 09 July, 2004; Oyu tolgoi of Ömnögobi province /43°03'55.6"N; 106°53'23.4"E/ (two individuals) on 13 July, 2004; Khatanbulag sum /43°27'36.8"N; 108°08'35.8"E/ (two birds) on 18 July, 2003 (Batsaikhan *et al.*, 2005); Ulaan Lake of Ömnögobi province /44°25.168" N; 103°46.644"E/ (one bird) on 26 July, 2004 (D.Lhagvasuren pers. comm.; Batsaikhan *et al.*, 2005); Sangiin Dalai spring, NW Bayantooroi sum of Ömnögobi province /44°55'N; 96°41'E/ (one individual) on 09 May, 2004 (B.Mijiddorj pers. comm.; Batsaikhan *et al.*, 2005); Havtsaliin Ar of Dundsaikhan in Ömnögobi province /43°42'N; 103°53'E/ (two birds) on 08 September, 2004 (Sh.Tsooj pers. comm.; Batsaikhan *et al.*, 2005) and (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Batsaikhan *et al.*, 2005; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 49,000 - 62,000 mature individuals. World Global breeding and resident ranges are estimated at 24,200,000 km² (BirdLife International, 2011). The total Mongolian population is less than 200-300 individuals (Bold & Tseveenmyadag, 2001). Density estimates range from a maximum of 0.22 Houbara bustards /km² during June to a minimum of 0.03 birds/km² in April in Galba Gobi, Mongolia (Nyambayar *et al.*, 2010).

Regional Population Trend: Decreasing.

Habitats & Ecology: It is a breeding visitor for Mongolia. They arrive at breeding sites by late April-early May. They inhabit desert steppe with hard gravelly soil. They prefer open areas with shrubs and bushes of Saxaul (*Haloxylon ammodendron*), *Ephedra* spp., *Sympegma regelii*, *Artemisia* spp., *Nitraria* spp., *Zygophyllum xanthoxylon*, *Amygdalus mongolica*, *Nitraria sibirica*, *Reaumuria soongorica*, and *Eurotia serotoides* in Trans-Altai and Alashani Gobi (Batsaikhan *et al.*, 2005). Houbara habitat in Galba Gobi is characterized by sparsely vegetated arid desert with low species diversity (Nyambayar *et al.*, 2010). After arriving in the breeding area, males begin to display and attract females. They nest on the ground in a shallow unlined hollow with gravel surrounded by scattered bushes and scrub in desert steppe and desert (Bold & Tseveenmyadag, 2001). The female lays 3-6 eggs of glossy, olive-brown colour with reddish-brown and grey streaks and spots. According to Batsaikhan *et al.* (2005), hatching date is the first week of June. The female incubates the eggs alone for 21-26 days. Young are tended by female and fed by her directly at first, later finding their own food. They live independently at c. 35 days after hatching. The male does not incubate the eggs or brood young. They feed on grasshoppers (Bannikov & Skalon, 1948), cicadas and beetles (Batsaikhan *et al.*, 2005). They eat green parts of green plants and seeds of various plants during the breeding season. They leave the breeding site for wintering grounds by late August-early October, depending on food availability and weather conditions.

Habitat Type: 8. Desert (8.2., 8.3.).

Dominant Threats: 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in breeding and feeding sites in the Gobi is a cause of habitat degradation associated with desertification.

1.3. Extraction-1.3.1. Mining: Gold and other mining, including coal, have directly and indirectly affected breeding success of the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.4. Transport-land: Development of human settlement, infrastructure construction, heavy machinery and railroads already built or planned are major threats to the species.

1.7. Fires: Saxaul forest fires burn not only this tree but also bushes and shrubs in the areas where the species breeds and rests.

3. Harvesting (hunting or gathering) -3.5. Cultural, scientific or leisure activities-3.5.3. Regional or international trade: There is no documentation of illegal Houbara trapping and trading for Mongolia. However, there is some evidence of illegal hunting. In recent years, Arabs from Qatar started hunting expeditions to this area and one of their campsites from last year was located during the survey. Nobody knows what they hunt. It is very likely that Houbara Bustard is one of their main target game species (Nyambayar *et al.*, 2010).

4. Accidental mortality-4.1. By-catch-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: See 3.5.3.
- 4.2. Collision-4.2.1. Pylon and building collision: It is a potential threat to the species after lines were installed near mining areas.
6. Pollution (affecting habitat and species)- 6.1.1. Global warming: Presumably due to warming, many suitable breeding habitats have been drying out in the South.
- 6.2. Land pollution-6.2.2. Domestic-6.2.3. Commercial/Industrial: Due to construction of human settlements and other infrastructure, breeding and feeding areas contain trash like plastic bags, machine parts and others. These are threats to the species.
7. Natural disasters- 7.1. Drought: Due to the drought of the last few years, important breeding and feeding sites have been drying out and the birds have been losing breeding, resting and refueling habitats in Mongolia.
- 7.2. Storms or flooding-7.3. Temperature extremes: Sand storms and sudden temperature drops threaten the species, especially young chicks with pins.
8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*), Saker Falcon, Steppe Eagle and Golden Eagle in the region prey upon eggs, flightless and slow-moving chicks, even some adults.
- 8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia. There is evidence from UAE that Houbara were infected by avian influenza.
9. Intrinsic factors-9.2. Poor recruitment or reproduction-9.3. High juvenile mortality- 9.5. Low densities-9.9. Restricted range: Potential threats facing the species include slow recovery of its population due to poor reproductive success and high mortality of juveniles in Mongolia. This species inhabits very restricted and limited habitats in low density in the Gobi; therefore habitat loss, destruction, human and livestock disturbance constitute severe threats to the species.
10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities besides tourism development that pose a threat to this species' breeding areas include mining and human populated sites.
- 10.4. Transport: Transport by car and horse near breeding areas have negatively affected breeding and non-breeding individuals.
- 10.5. Fire: See 1.7.

Conservation Measures: Listed as Very Rare in the Mongolian Red Data Book (1997) and included in the International Red Book. Hunting this species has been prohibited since 1995. Listed in CITES Appendix I. Approximately 27.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Rallidae

121. Scientific Name: *Coturnicops exquisitus*

Species Authority: (Swinhoe, 1873)

Common Names: Swinhoe's Rail or Swinhoe's Yellow Crake (English), Bichilhen tunjeehei or bichilhen tunjuur (Mongolian)

Synonyms: *Porzana exquisitus* Gmelin, 1789

Global Status: Vulnerable, C2a(ii)

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Russian Federation, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: A.A.Vinokurova (Russian biologist) observed a single bird near Tari (Tooroi) Lake, Dornod province (Dawaa *et al.*, 1994). During the field surveys of White-naped Crane, S.Gombobaatar, N.Tseveenmyadag, and K.Ozaki (Yamashina Institute for Ornithology) observed a young bird in marshy and swampy areas of Khurkh River valley in Hentii province (at 48.33600°N; 110.44000°E) on 8 September, 2002 (S.Gombobaatar pers. comm.).

Population: The global population consists of 2,500-9,999 mature individuals. Global breeding and resident ranges are estimated at 152,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: For Mongolia, it is a vagrant species. There are only two records in the east. It migrates via swamps and reed beds near lakes and rivers in the Khurkh River valley in eastern Mongolia by late April-early May (on spring migration) and by late August-early September (on autumn migration), depending on food availability and weather conditions.

Habitat Type: Potential habitats are 4. Grassland (4.4. on migration); 5. Wetlands (5.1. valleys with tall vegetation), 5.4., 5.5. (valleys with reeds and sedge grasses), 5.6., 5.14., 5.16., 5.17 (in valleys with reeds and marshy grasses on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Habitat loss and degradation throughout the refuelling and feeding ranges are critical threats to the species. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of wetlands and marshes.

1.4. Infrastructure development-1.4.3. Tourism and recreation-1.4.5. Transport water: ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species refuels and summers, are major threats to the species.

1.7. Fires: Steppe fires burn feeding habitats near lakes and rivers in spring and autumn.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are summering and refueling sites for the species. Due to drought of the last few years, important sites have dried out and the birds have been losing resting and refueling habitats in Mongolia.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region potentially prey upon them at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities that pose a threat to this species' stop-over and feeding areas include mining, haymaking, flooding and an increased frequency of steppe fires.

10.4. Transport: Transport via car and horse near feeding and stopover areas have negatively affected non-breeding individuals. In recent years, local herders hay sedge grasses along lakes and river valleys, because sedges grow taller and denser than other plants in the valleys. Horsemen are a cause of considerable disturbance.

10.5. Fire: Fires also cause habitat destruction at nesting sites and can rapidly decimate nesting pairs. See 1.7.

Conservation Measures: The locations of the species found in Mongolia were in protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes
Family: Rallidae

122. Scientific Name: *Rallus aquaticus*

Species Authority: Linnaeus, 1758

Common Names: Water Rail (English), Usny tunjuur or tunjuur (Mongolian)

Subspecies in Mongolia: *R. a. aquaticus*, *R. a. indicus* (see Baker (1993); Howard & Moore (1994); Taylor and Perlo (1998); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Rallus minor*; *Aramus aquaticus*

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock, drought and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Iraq, Georgia, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Bangladesh, Myanmar, Thailand, Malaysia, Lao, Viet Nam, Brunei Darussalam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species is found in river valleys and around lakes with high vegetation and reed beds, as at Buur, Kharaa, Boroo (Selenge province) and Tes Rivers (Kozlova, 1930; Fomin & Bold, 1991; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005), lower Onon, and along the Ulz and Herlen Rivers (Dawaa *et al.*, 1994).

Population: The global population consists of 100,000-1,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: On migration, the species can be found near lakes, rivers, springs, oases, pools and ponds with tall vegetation. It is a rare breeder in Mongolia, arriving at breeding sites by mid-April to early May. It is one of the most elusive breeders in the country. Its breeding habits are poorly documented. Breeding pairs nest in reed beds, swamps and marshes with tall sedges and other marsh grasses. The nest—a bulky cup of dead grasses and reeds and other water-shade plants—is concealed in tall vegetation standing near or in water. Breeding begins in mid-May to early June. The female lays 6-10 (5-15) eggs of a glossy creamy white to pale creamy-buff colour, with sparse reddish-brown or blue-grey markings, spots and occasional blotches near the larger end. Both adults (but mainly the female) incubate the eggs for 19-20 days. After hatching, the young stay in the nest for only a short period. While the female broods the young, the male feeds the female and also broods. After a few days, broods can follow adults and find their own food. Broods live independently within 8 weeks (Harrison,

1975). They leave the breeding site for wintering ground in late August to early September.

Habitat Type: 5. Wetlands (5.1., 5.2. with reed beds and sedges, 5.4., 5.5., 5.6., 5.7., during the breeding season, 5.8., 5.9. on migration, 5.13., 5.15., 5.16., 5.17. with reeds and marsh grasses on migration); 12. Artificial – Aquatic (12.2., 12.9. with reeds and sedges).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic/overgrazing of livestock at both non-breeding and breeding sites is a cause of habitat degradation associated with drought of wetlands and marshes/, 1.3. Extraction-1.3.1. Mining: /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / Ecotourism development, human settlement, and tourist camps near non-breeding and breeding sites are major threats, causing the species to abandon the site/, 1.7. Fires /fires burn the breeding habitats with their nests with eggs and young/; 2. Invasive alien species -2.1. Competitors /Muskrat (*Ondatra zibethicus*) in river valleys and lakes such as Khar-Us Lake, Orkhon, Selenge and Kharaa Rivers/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.3. Poisoning /chemicals, used against insects and pests like Siberian Moth and Brandt's Vole (*Lasiopodomys brandti*) are causes of the individual poisoning in breeding and non-breeding areas/; 5. Persecution -5.1. Pest control /see 4.1.2.3. /; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming/ponds, islands of saline and freshwater lakes with reed beds have been drying out due to apparent climate change/ 6.3. Water pollution/domestic water pollution is a cause of low species density associated with habitat change/; 7. Natural disasters -7.1. Drought/ponds, pools and small freshwater lakes with reed beds in Mongolia are important habitats for the species. Due to several consecutive years of drought, important sites have dried out and the birds have been losing Mongolian breeding, resting, roosting and refueling habitats/, 7.3. Temperature extremes / A cause of overcooling both adults and young/; 8. Changes in native species dynamics - 8.2. Predators / carnivores such as Raccoon Dog (*Nyctereutes procynoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) prey upon the flightless slow-moving chicks by day and night. An increase in competitors and predator numbers, and a decrease in food base, also constitute threats to this species/ 8.5. Pathogens and parasites/highly pathogenic avian influenza is a potential threat to the species/ 10. Human disturbance - 10.4. Transport /busy roads, boats and cars near tourist camps negatively affect individuals in the area/, 10.5. Fire /see 1.7. /

Conservation Measures: Approximately 10.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Rallidae

123. Scientific Name: *Crex crex*

Species Authority: (Linnaeus, 1758)

Common Names: Corn Crake (English), Yavgan tunjin or tarian tunjuur (Mongolian)

Synonyms: *Rallus crex* Linnaeus, 1758

Global Status: Near Threatened

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient in Mongolia. Population size is unknown but may qualify for a threat category; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Saint Pierre and Miquelon, Greenland, Iceland, Mauritania, Morocco, Mali, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, France, Ghana, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Palestinian Territory Occupied, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Tajikistan, Kyrgyzstan, China, Mongolia, Viet Nam. It is regionally extinct in the Faroe Islands and has uncertain presence and origin in Guinea.

Regional Distribution: This species nests in reed beds at the Zelter River valley (Boldbaatar, 2005) and Northern Uvs Depression (Fomin & Bold, 1991; Dawaa *et al.*, 1994). A single bird was found in a plantation at Khovd town on 31 May, 2006 (Bräunlich, 2006a; Mainjargal, 2005). This species possibly migrates through reed beds of the Khar-Us, Khar and Dörgön Lakes, and Orkhon Selenge River valley (Stenzel *et al.*, 2005).

Population: The global population consists of 5,000,000 - 10,000,000 mature individuals. Global breeding and resident ranges are estimated at 12,400,000 km² (BirdLife International, 2011). BirdLife International (2004) estimated 1.3-2 million breeding pairs in Europe (including 1-1.5 million pairs in European Russia). A further 515,000-1,240,000 pairs are estimated for Asiatic Russia, yielding a global total of 1.8-3.24 million pairs and 5.45-9.72 million individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a rare breeding visitor: there are only two breeding records in Mongolia. They arrive in the breeding sites by late April-early May. This species inhabits open habitats, mainly meadows with tall grass and reed beds, and riverine meadows of sedges. Breeding pairs nest on the ground in dense vegetation and the nest is constructed from dead stems and leaves. Often surrounding stems are pulled over the top to form a loose canopy. The average clutch-size is c.10 eggs (6-14) and two broods may be raised per season (BirdLife International, 2011). The eggs' colour is pale greenish-grey or reddish buff with reddish-brown, purplish or grey blotches and spots. Mainly the female incubates the eggs for 15-18 days. Broods leave the nest just a few hours after hatching. Both adults feed hatchlings for 3-4 days until they can find their own food. They can fly at 5 weeks (Harrison, 1975). According to BirdLife International (2011), it feeds on a wide range of invertebrates, including taxa that live on plants, on the soil surface and in the soil. It takes a large number and wide variety of insects, as well as arachnids, earthworms, young frogs, green parts of plants, young shoots and seeds. It begins to leave its breeding grounds in August, with a peak in September, migrating at night.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1. valleys with tall vegetation), 5.4., 5.5. (valleys with reeds and sedge grasses), 5.6., 5.14., 5.16., 5.17 (in valleys with reeds and marshy grasses on migration). They avoid very wet marshes and swamps.

Dominant Threats: Potential threats to the species follow;

1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation also associated with drought of wetlands and marshes. Habitat loss is one of the potential threats to the species.

1.4. Infrastructure development-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species is found.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the hydroelectric dams, the Zavkhan River dried up. The drought has made significant changes to Airag and Zost Lakes and to the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have also dried up. This change

threatens breeding and non-breeding birds through habitat loss.

- 1.7. Fires: Steppe fires burn breeding and feeding habitats near lakes and rivers in spring and autumn.
 2. Invasive alien species -2.1. Competitors: The Muskrat (*Ondatra zibethicus*) destroys reeds near nesting sites.
 6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.
 7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in western Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Mongolia.
 - 7.3. Temperature extremes: Cold rain and sudden temperature drops threaten both adults and young chicks.
 8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Eurasian Badger (*Meles meles*) in the region easily prey upon the eggs and the flightless slow-moving chicks at night.
 - 8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.
 10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities that pose a threat to this species' breeding areas include reed cutting, flooding and an increased frequency of steppe fires.
 - 10.4. Transport: Transport by boat, car and horse near breeding areas have been negatively affecting breeding and non-breeding individuals.
 - 10.5. Fire: Fires cause habitat destruction at nesting sites and can rapidly decimate nesting pairs. See 1.7.
- Conservation Measures:** Approximately 45.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Rallidae

124. Scientific Name: *Amaurornis phoenicurus*

Species Authority: (Pennant, 1769)

Common Names: White-breasted Waterhen (English), Tsagaanomruut tunjuuhei (Mongolian)

Subspecies in Mongolia: *A. p. chinensis* (see Taylor & Perlo (1998) for further details).

Taxonomical Notes: According to body measurements of two dead birds found in the country and publications by John Mackinnon&Karen Phillipps (2000), Ornithological Society of Japan (2000), Woo Shin Lee *et al.* (2003) and Ripley *et al.* (1977), subspecies *A.phoenicurus chinensis* Boddaert, 1783 occurs in Mongolia (Gombobaatar *et al.*, 2005).

Synonyms: *Gallinula phoenicurus* Pennant 1769; *Fulica chinensis* Boddaert, 1783

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (Mongolia), S.Gantugs (Mongolia), P.Jargalsaikhan (Mongolia), B.Yumjirmaa (Mongolia), and J.Munkhbat (Mongolia).

Global Distribution: Yemen, United Arab Emirates, Oman, Seychelles, Pakistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Christmas Island,

Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: S. Gombobaatar, D. Sumiya (NUM & MOS) and E. Potapov (Russian ornithologist) found the complete fresh remains of a dead bird beneath a Saker Falcon nest in a wooden building at the ground well at Tsaidam well of Darkhan Sum in Hentii province (46.42516°N; 109.00767°E) on 8 May, 2004. Christopher W. Leahy (Audubon Society, USA) also found a dead bird at the "Three Camel Lodge" tourist camp of Ömnögobi province, on 2 June, 2004 (Gombobaatar *et al.*, 2005). The cause of death was back injury due to attack by Saker Falcon. The distance between the place the bird was found, in the Mongol Daguur arid steppe in Central Mongolia, and the species distribution in South East Asia was at least 1600 km. Ders grass *Achnatherum splendens* and Gramineae grasses grow in the valleys of mountain and hills and short grass steppe vegetation in mountain slopes, and a salt lake is situated 10 km north of the location. C.W. Leahy's finding at the "Three Camel Lodge" tourist camp was 1200 km away from the northern limit of the species distribution.

Population: The global population consists of 100,000 - 1,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant species; there are only two well-protected records in May and June. The species occurs in damp scrub, lake sides, river banks, mangrove and fields (Mackinnon & Phillipps, 2000), foraging on the ground, pecking at tidbits with chicken-like movements. They also often forage above ground, in low bushes and small trees, but their long toes make them rather clumsy among the branches. Their slender body allows them to quickly and quietly slip through the undergrowth. In Sungei Buloh, White-breasted Waterhens can be seen stepping on lotus leaves searching for tidbits. But inevitably, the leaf they are on slowly sinks. They then step off to the next leaf. White-breasted Waterhen forages alone or in pairs. They are active during the day. When alarmed, they may fly or run into dense undergrowth, dashing in with their heads down. They roost in low bushes and trees at night (Morten, 2000).

Habitat Type: Found in dry steppe on migration. However, potential habitats in Mongolia are:

Wetlands (5.1., 5.2. with reed beds and sedges, 5.4., 5.5., 5.6., 5.7., during the breeding season, 5.8., 5.9. on migration, 5.13., 5.15., 5.16., 5.17. with reeds and marsh grasses on migration); 12. Artificial – Aquatic (12.2., 12.9. with reeds and sedges).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic, 1.3. Extraction-1.3.1. Mining, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport (water), 1.7. Fires; 6. Pollution (affecting habitat and species) -6.1. Atmospheric pollution-6.1.1. Global warming /In recent years, there are many unusual records of migratory bird species. Number of species and individuals of wintering waterfowls have increased over the last decade in Mongolia (Gombobaatar, 2004). There is evidence that global warming might be a factor in adaptive behavioral and physiological changes leading to changing migration routes for migratory birds (Gombobaatar *et al.*, 2005)/; 7. Natural disasters -7.1. Drought, 7.2. Storms or flooding, 7.3. Temperature extremes: Starvation, cold temperatures and drought are the main causes of death during spring in Mongolia (Gombobaatar *et al.*, 2005)/; 8. Changes in native species dynamics -8.1. Competitors, 8.2. Predators, 8.3. Food base, 8.5. Pathogens or parasites; 10. Human disturbance -10.1. Tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: All recent records were outside of protected areas. They presumably migrate through protected areas, possibly Gurvan Saikhan mountain range, and Important Bird Areas of Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes
Family: Rallidae

125. Scientific Name: *Porzana parva*

Species Authority: (Scopoli, 1769)

Common Names: Little Crake (English), Khurgan tunjger (Mongolian)

Synonyms: *Rallus parvus* or *Crex parva*

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable, as its total distribution covers less than 1% of Mongolia. It is also connected with its limited occurrence and unknown population size. Further research is needed into population trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Greenland, Cape Verde, Senegal, Mauritania, Gambia, Morocco, Liberia, Ireland, Portugal, Spain, Algeria, United Kingdom, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Uganda, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China.

Regional Distribution: This species breeds in reed beds at Khar-Us Lake (Great Lakes Depression) (A.Bräunlich pers. comm. and S.Gombobaatar pers. comm. and photographs), and presumably migrates through Khar and Dörgön Lakes in the Great Lakes Depression.

Population: The global population consists of 100,000 - 1,000,000 mature individuals. Global breeding and resident ranges are estimated at 6,510,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a rare breeding visitor to Mongolia. Migrants arrive in breeding sites (Khar-Us Lake of Khovd province) by late April-early May. Breeding season continues to July. Pairs breed in swamps and marshy areas with dense reeds and sedges on the edge of the lake. Nests are built on the ground, hidden in tall sedges and other plants, or in tussocks. The nest is constructed of stems, dried grasses, sedges and similar grasses, lined with finer dried grasses and other plant-materials. The female lays 7-8 (4-10) eggs of slightly glossy, yellowish-buff colour with small reddish-brown spots and blotches. Both parents incubate the eggs for 21-25 days. Broods leave the nest within a few days and are tended by both parents. They can fly at 45-50 days. Broods can find their own food after leaving the nest. During the migration, birds can be found in reed beds, tall sedges and scrub near lakes, rivers, oases and other wetlands in the Great Lakes Depression and Valley of the Lakes. They leave the breeding sites for wintering grounds by late August to early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1., 5.2. with reed beds and sedges, 5.4., 5.5., 5.6., 5.7., during the breeding season, 5.8., 5.9. on migration, 5.13., 5.15., 5.16., 5.17. with reeds and marsh grasses on migration); 12. Artificial – Aquatic (12.2., 12.9. with reeds and sedges).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock at both non-breeding and breeding sites is a cause of habitat degradation also associated

with drought affecting wetlands and marshes/, 1.3. Extraction-1.3.1. Mining: /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / ecotourism development, human settlement and tourist camps near non-breeding and breeding sites are major threats to the species, causing them to abandon sites/, 1.7. Fires /steppe fires burn the breeding habitats along with nests, eggs and young/; 2. Invasive alien species -2.1. Competitors /Muskrat (*Ondatra zibethicus*) in river valleys and lakes such as Khar-Us Lake, Orkhon, Selenge and Kharaa Rivers/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.3. Poisoning /chemicals used against pests like Siberian Moth and Brandt's Vole (*Lasiopodomys brandti*) are causes of individual poisoning in breeding and non-breeding areas/; 5. Persecution -5.1. Pest control /see 4.1.2.3. /; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, saline and freshwater lakes with reed beds have been drying out, apparently due to climate change/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters-7.1. Drought /ponds, pools and small freshwater lakes with reed beds in Mongolia are important habitats for the species. Due to the drought over several years, important sites have dried out and the birds have been losing their breeding, resting, roosting and refueling habitats/, 7.3. Temperature extremes /are a cause of overcooling both adults and young/; 8. Changes in native species dynamics -8.2. Predators /carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis lupus*), and Eurasian Badger (*Meles meles*) prey flightless and slow-moving chicks day and night. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species/, 8.5. Pathogens and parasites /highly pathogenic avian influenza are a potential threat to the species/; 10. Human disturbance- 10.4. Transport /busy roads, boats and cars near tourist camps have negatively affected nearby populations/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 100% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Rallidae

126. Scientific Name: *Porzana pusilla*

Species Authority: (Pallas, 1776)

Common Names: Baillon's Crake (English), Oodon tunjger (Mongolian)

Subspecies in Mongolia: *P. p. pusilla* (see Baker (1993); Howard & Moore (1994); Taylor and Perlo (1998); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Rallus pusillus* or *Crex pusilla*

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock, drought and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Senegal, Mauritania, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola,

Namibia, Czech Republic, Slovenia, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Zambia, Ukraine, Bulgaria, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Somalia, Yemen, Madagascar, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea, New Zealand.

Regional Distribution: This species nests in lake and river valleys with reed beds and high marshy vegetation (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Gombobaatar, 2012), such as at Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression), Achit Lake (Mongol-Altai Mountain Range), Khar-Us, Khar Lakes and the delta of Khovd River with reed beds (Great Lakes Depression); Zavkhan River with reed beds (Desert steppe depression in Zavkhan); Hövsgöl Lake valley and Eg River), (Hövsgöl Mountain Range); Shishgid and Dood Lake wetlands (Darkhad Depression); Orkhon and Selenge Rivers (Orkhon-Selenge River basins); upper Tuul River (Hentii Mountain Range); along valleys of the Ulz River, Khalkh, Degee, Nömrög, Azarga Rivers, and Buir, Shavar and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region); Kholboo, Bööntsagaan, Orog and Taatsyn Tsagaan Lakes (Valley of the Lakes). It migrates through the breeding areas and Sangiin Dalai and Ögii Lakes (Khangai Mountain Range); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); upper Onon, Balj and Herlen Rivers (Hentii Mountain Range); Ulz-Herlen River basins, Middle Khalkh Steppe and Eastern Mongolian Plain (Kozlova, 1930; Sushkin, 1938; Bold, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stenzel *et al.*, 2005). Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 13,000 - 37,000 mature individuals. Global breeding and resident ranges are estimated at 17,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migrants arrive at breeding sites by mid-April-early May. Breeding season continues from May-July. It inhabits swamps, swampy edges, marshes with sedges and reeds surrounding lakes and rivers. Breeding pairs nest on the ground, hidden in growing plants, tussocks, and tall sedges. The nest is built by the female, using stems, leaves, sedges and similar plants lined with finer dried grasses and other plant materials. The female lays 6-8 eggs (4-9) of a slightly to moderately glossy, yellowish buff colour with yellowish -brown spots and streaks. Both adults incubate the eggs for 21-23 days. The broods remain in the nest for a few days before leaving the nest to follow the parents. Both parents brood the young. They can find their own food a few days after hatching. They leave the breeding sites for wintering grounds by late August to early September, depending on breeding success, food and weather conditions. On migration, they can be found along lake shores, river banks with dense vegetation, swamps, marshes and pools with reed beds in the areas mentioned above.

Habitat Type: 5. Wetlands (5.1., 5.2. with reed beds and sedges, 5.4., 5.5., 5.6., 5.7., during the breeding season, 5.8., 5.9. on migration, 5.13., 5.15., 5.16., 5.17. with reeds and marsh grasses on migration); 12. Artificial – Aquatic (12.2., 12.9. with reeds and sedges).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock at both non-breeding and breeding sites is a cause of habitat degradation also associated with drought affecting wetlands and marshes/, 1.3. Extraction-1.3.1. Mining: /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / ecotourism development, human settlement, and tourist camps near non-breeding and breeding sites are major threats, causing the species to abandon

some sites/-1.4.6. Dams /two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After the construction of the dams, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, marsh grasses and wetlands around the lakes and channel have also dried. This change threatens breeding and non-breeding birds through loss of habitat and food resources/, 1.7. Fires /steppe fires burn the breeding habitats with nests, eggs and occasionally young/; 2. Invasive alien species -2.1. Competitors /Muskrat (*Ondatra zibethicus*) in river valleys and lakes, such as Khar-Us Lake, Orkhon, Selenge and Kharaa Rivers/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./-4.1.2.3. Poisoning /chemicals, used against insects and Brandt's Vole (*Lasiopodomys brandti*), are causes of the individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /a potential threat and cause of accidental mortalities/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have and drying out, apparently apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters-7.1. Drought /ponds, pools and small freshwater lakes with reed beds in Mongolia are important habitats for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing breeding, resting, roosting and refueling habitats/, 7.3. Temperature extremes /A cause of overcooling both adults and young/; 8. Changes in native species dynamics -8.2. Predators /carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) prey upon the flightless, slow-moving chicks by day and night. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species/, 8.5. Pathogens and parasites /highly pathogenic avian influenza is a potential threat to the species/; 10. Human disturbance- 10.4. Transport /busy roads, boats and cars near tourist camps have negatively affected individuals that occur nearby/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Rallidae

127. Scientific Name: *Porzana porzana*

Species Authority: (Linnaeus, 1766)

Common Names: Spotted Crake (English), Toodon tunjger or toodon tunjuur (Mongolian)

Synonyms: *Rallus porzana* or *Gallinula porzana*

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. Population size is unknown but may qualify for a threat category; therefore, it is not possible to make an accurate regional assessment until further population information is gained. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Greenland, Iceland, Senegal, Mauritania, Gambia, Morocco, Mali, Liberia, Ireland,

Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, France, Ghana, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Burundi, Tanzania, Uganda, Mozambique, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Myanmar, Thailand. It is regionally extinct in Croatia.

Regional Distribution: This species has been recorded in reed beds at Airag Lake (Boldbaatar, 2007) and Bulgan River Valley in Dzungar Gobi during the breeding season. It has also been recorded in Buyant (plantation in Khovd Town of Khovd Province on 31 May, 2006 [Bräunlich, 2006a]) and at lakes and oases at Trans-Altai and Alashani Gobi on migration (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2008). Calls of breeding birds were recorded on the northern shore of Uvs Lake of Uvs province on 29 June, 1991 (Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 100,000-1,000,000 mature individuals. Global breeding and resident ranges are estimated at 10,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a rare breeding visitor to Mongolia. The species arrives at breeding sites by late April to early May and breeding season continues into July. Breeding pairs construct nests on the ground or hidden in tussocks, tall plants and shrubs standing by or in water, in swamps, bogs, marshes and swampy areas bordering lakes and pools. The nest is built of dried leaves and stalks lined with soft dried plants and fine grasses. The female lays 8-12 eggs of slightly glossy olive buff colour, with reddish-brown and grey spots and blotches. Both sexes incubate the eggs for 18-21 days. Both parents brood the chicks. They leave the breeding sites for wintering grounds by late August to early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1., 5.2. with reed beds and sedges, 5.4., 5.5., 5.6., 5.7., during the breeding season, 5.8., 5.9. on migration, 5.13., 5.15., 5.16., 5.17. with reeds and marsh grasses on migration); 12. Artificial – Aquatic (12.2., 12.9. with reeds and sedges).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock at both non-breeding and breeding sites is a cause of habitat degradation also associated with drought of the wetlands and marshes/, 1.3. Extraction-1.3.1. Mining: /gold and other mining activities affect the species directly and indirectly/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / Ecotourism development, human settlement and tourist camps near non-breeding and breeding sites are major threats, causing the species to abandon the site/, 1.7. Fires /fires burn the breeding habitats along with nests, eggs and young/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.3. Poisoning /chemicals used against insects and pests like Siberian Moth and Brandt's Vole (*Lasiopodomys brandti*) are causes of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /a potential threat and cause of accidental mortalities/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been drying out, apparently due to climate change/, 6.3. Water pollution / domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters-7.1. Drought /ponds, pools and small freshwater lakes with reed beds in Mongolia are important habitats for the species. Due to consecutive years of drought, important sites have dried out and the birds are losing Mongolian breeding, resting, roosting and refueling habitats /, 7.3. Temperature extremes /A cause of overcooling both adults and young/; 8. Changes in native species dynamics -8.2. Predators /Carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis*

lupus) and Eurasian Badger (*Meles meles*) prey upon the flightless slow-moving chicks by day and night. An increase in competitor and predator numbers and a decrease in the food base also constitute threats to this species/, 8.5. Pathogens and parasites /highly pathogenic avian influenza is a potential threat to the species/; 10. Human disturbance- 10.4. Transport /busy roads, boats and cars near tourist camps have negatively affected individuals in the area/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Rallidae

128. Scientific Name: *Gallinula chloropus*

Species Authority: (Linnaeus, 1758)

Common Names: Common Moorhen, Moorhen, Waterhen, Common Gallinule or Florida Gallinule (English), Khajilgat khanchir or khajilgat tunjuur (Mongolian)

Subspecies in Mongolia: *G. c. chloropus* (see Baker (1993); Howard & Moore (1994); Taylor and Perlo (1998) for further details)

Synonyms: *Fulica chloropus* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to poaching and habitat loss and degradation by livestock, drought and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India,

Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Northern Mariana Islands, It is regionally extinct in Equatorial Guinea.

Regional Distribution: This species nests in dense reed beds and tall marsh grasses near pools, ponds and lakes (Gombobaatar, 2012) at Tashgain Tavan Lake (Buir Lake-Khalkh gol-Kyangan) (Fomin & Bold, 1991; Dawaa *et al.*, 1994) and Bayannuur Lake of Bayannuur sum of Bulgan province) (S.Gombobaatar, pers. comm. and photographs). It is also found in valleys of Bulgan River (Baruunkhurai Depression), lower Eg River (Orkhon-Selenge River basins), Hövsgöl and Eg Rivers (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya & Skryabin, 1989; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003) during the breeding season. Single birds were seen in Baga Lake of Zuungobi in Ömnögobi province (Sh. Boldbaatar pers. comm.) and two adult birds at a small pond near Darkhan sum of Hentii province in May, 2005 (S.Gombobaatar pers. comm.). One breeding pair with two chicks was seen in Baga Lake of W. Uvs Lake in Uvs Lake Depression 08 July, 1991 (Archimaeve-Ozerskaya & Zabelin, 2010). It migrates through breeding areas, the found locations and Khalkh-Khyangan-Buir Lake region.

Population: The global population consists of 3,900,000 - 8,100,000 mature individuals. Global breeding and resident ranges are estimated at 51,100,000 km² in the World (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: For Mongolia, it is a breeding visitor. Breeding birds arrive in late April–early May. It breeds at the edge of all kinds of waters, including small marshes and ditches. They like to inhabit marshes, pools, swamps and other type of wetlands with tall reed, sedges, and shrubs. They nest on the ground by water or among plants in water, rarely in thick shrubs and reeds. Both sexes build a bulky nest platform of dried and dead plants concealed by tall grasses and reeds. The male brings nest materials to the female. The female lays 5-11 (4-20) eggs of glossy, greenish-white to pale buff or greenish with reddish-brown and blue-grey spots and blotches. Both parents incubate the eggs for 19-23 days. Hatchlings remain in the nest for several days. The parents brood and feed them for 3 weeks. They can fly at 6-7 weeks (Harris, 1975). They eat insects on plants, snails, and other small vertebrates, and leaves, seeds and other parts of green plants. Migration begins in Mongolia late August-early September depending on weather conditions, food resources and threats.

Habitat Type: 5. Wetlands (5.1., 5.2. with reed beds and sedges, 5.4., 5.5., 5.6., 5.7., during the breeding season, 5.8., 5.9. on migration, 5.13., 5.15., 5.16., 5.17. with reeds and marsh grasses on migration); 12. Artificial – Aquatic (12.2., 12.9. with reeds and sedges).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock at both non-breeding and breeding sites is a cause of habitat degradation associated with drought of wetlands and marshes/, 1.3. Extraction-1.3.1. Mining: /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / ecotourism development, human settlement, and tourist camps near non-breeding and breeding sites are major threats, causing the species to abandon sites/, 1.7. Fires / steppe fires burn breeding habitats with nests, eggs and occasionally young/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this one, are collected and stuffed for display on walls and desks of public places/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals, used against insects and Brandt's Vole (*Lasiopodomys brandti*), are causes of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /a potential threat and cause of accidental mortalities/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been drying out perhaps due to a global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters-7.1. Drought /ponds, pools and small freshwater lakes with reed beds in Mongolia are important habitats for the species. Due to the drought over the last few years, important sites have dried out and the birds have been losing breeding, resting, roosting and refueling habitats/, 7.3. Temperature extremes

/a cause of overcooling both adults and young/; 8. Changes in native species dynamics -8.2. Predators / carnivores such as Raccoon Dog (*Nyctereutes procynoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) prey upon the flightless slow-moving chicks by day and night. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species/, 8.5. Pathogens or parasites /highly pathogenic avian influenza is a potential threat to the species/; 10. Human disturbance-10.4. Transport /busy roads, boats and cars near tourist camps have been negatively affecting individuals in the area/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 14.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Rallidae

129. Scientific Name: *Fulica atra*

Species Authority: Linnaeus, 1758

Common Names: Common Coot, Coot, Black Coot, Australian Coot or Eurasian Coot (English), Khalzan tunjuu or khalzan tunjuur (Mongolian)

Subspecies in Mongolia: *F. a. atra* (see Baker (1993); Howard & Moore (1994); Taylor and Perlo (1998); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Greenland, Iceland, Senegal, Western Sahara, Mauritania, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands, New Zealand.

Regional Distribution: This species breeds at Aчит, Dayan and Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression); Khar-U, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River with reed beds (Great Lakes Depression); Zavkhan River reed beds (Desert steppe depression in Zavkhan); Orkhon River valley, Sangiin Dalai and Ögii Lakes (Khangai Mountain Range); Tui and Baidrag Rivers and many small lakes (South Khangai Plateau); Terhiin Tsagaan, Sangiin Dalai, Telmen and Khar Lakes with wide shores, and Ider and Chuluut

River valleys (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River valley (Hövsgöl Mountain Range); Lower Orkhon, Selenge, Eg, Kharaa and Yeröö River valleys (Orkhon-Selenge River basins); Tuul River valley (Hentii Mountain Range); Herlen-Ulz River basins; Khalkh, Degee, Nömrög, Azarga and Galdastai River valleys, and Buir, Shavar and Tashgain Tavan Lakes (Buir Lake- Khalkh River –Khyangan Mountain); Bööntsagaan, Orog and Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi). It migrates through the breeding areas and small steppe lakes, ponds and oases at the Trans-Altai Gobi, Northern Gobi and Eastern Gobi Depression (Molleson, 1897; Kozlova, 1930; Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 8,900,000 - 9,800,000 mature individuals. Global breeding and resident ranges are estimated at 27,500,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: For Mongolia, it is a common breeder. The species arrives at breeding sites by early May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from May-July. They nest on the ground or dry areas with tussocks, sparse reeds and marshy swampy grassy areas on/near pools, ponds, lakes, rivers and wetlands (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Two adults build the nest, a bulky cup of dead and dried leaves and stems of surrounding plants. Mainly, the male brings nest materials and the female constructs. The female lays 6-9 (rarely 5-14) eggs of glossy, pale buffish-stone colour with dark brown or dark spots and markings. Both sexes incubate the eggs for 21-24 days. Both parents brood and feed them for 3-4 days. Later they can find their own food. Broods live independently at 8 weeks. They leave the breeding site for wintering grounds by late August-early September, depending on breeding success, food and weather conditions.

Habitat Type: 5. Wetlands (5.1., 5.2. with reed beds and sedges, 5.4., 5.5., 5.6., 5.7., during the breeding season, 5.8., 5.9. on migration, 5.13., 5.15., 5.16., 5.17. with reeds and marsh grasses on migration); 12. Artificial – Aquatic (12.2., 12.9. with reeds and sedges).

Dominant Threats: 1. Habitat loss and degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock at both non-breeding and breeding sites is a cause of habitat degradation associated with drought of wetlands and marshes/, 1.3. Extraction-1.3.1. Mining: /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation / ecotourism development, human settlement and tourist camps near non-breeding and breeding sites are major threats to the species, causing it to abandon sites/-1.4.6. Dams /two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dams, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, marsh grasses and wetlands at the lakes and channel also dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources/, 1.7. Fires /fires burn breeding habitats with nests, eggs and occasionally young/; 2. Invasive alien species -2.1. Competitors /Muskrat (*Ondatra zibethicus*) in river valleys and lakes such as Khar-Us Lake, Orkhon, Selenge and Kharaa Rivers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public places/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals, used against insects and Brandt's Vole (*Lasiopodomys brandti*), are causes of individual poisoning in breeding and non-breeding areas/, 4.2. Collision -4.2.1. Pylon and building collision /a potential threat and cause of accidental mortalities/; 5. Persecution -5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /ponds, islands of saline and freshwater lakes with reed beds have been drying out, apparently due to global warming/, 6.3. Water pollution /domestic water pollution is a cause of low density of the species, associated with habitat change/; 7. Natural disasters-7.1. Drought /ponds, pools and small freshwater lakes with reed beds in

Mongolia are important habitats for the species. Due to drought over the last few years, important sites have dried out and the birds have been losing breeding, resting, roosting and refueling habitats/, 7.3. Temperature extremes /a cause of overcooling both adults and young/; 8. Changes in native species dynamics -8.2. Predators /carnivores such as Raccoon Dog (*Nyctereutes procynoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) prey upon the flightless slow-moving chicks by day and night. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species/, 8.5. Pathogens or parasites /highly pathogenic avian influenza is a potential threat to the species/; 10. Human disturbance- 10.4. Transport /busy roads, boats and cars near tourist camps have negatively affected area individuals/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Gruidae

130. Scientific Name: *Grus leucogeranus*

Species Authority: Pallas, 1773

Common Names: Siberian Crane, Siberian White Crane or Great White Crane (English), Tsagaan togoruu (Mongolian)

Global Status: Critically Endangered, A3cde

Regional Status: Critically Endangered, D1

Rationale for Assessment: This species has been assessed as Critically Endangered, D1, because the number of mature individuals in Mongolia is less than 50. This species' distribution cover less than 1% of Mongolia, however, it has not been classified as vagrant as it is known to summer in eastern Mongolia every year. The population is likely to be declining as a result of habitat loss and degradation from overgrazing, steppe fires, drought and human disturbance. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009- Critically Endangered

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Republic of Korea, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, India, China, Mongolia, Hong Kong, Japan.

Regional Distribution: It is a rare migrant and summer visitor (Bold *et al.*, 1995) that has been reported to breed in or near to Mongolia in the past (Kozlova, 1932&1933), but there is no evidence to support such reports (Ostapenko *et al.*, 1983). Records are the followings: Ögii Lake (an adult in September, 1982) (Müller, 1986); Khaichiin Tsagaan Lake in the Ulz River floodplain (one individual in July, 1981, and one summering bird in June, 1988) (Ostapenko *et al.*, 1983; Bold *et al.*, 1995), one adult in June, 1998 (BirdLife International, 2001) and Bulan Shavar Lake of Dornod province (BirdLife International, 2001). Single birds have been observed at Buur River of Selenge province, Tari Lake of Dornod province, Böhög and Tuul Rivers in May, 1958; Khaichiin Tsagaan Lake in July-August, 1981 and Ulz River (49°28'N; 113°50'E) in June, 1987; Ulz River in August, 1988; Döröö Lake of Chuluunkhoroot sum in Dornod province on 19 July, 1994; Bööroljuut of Bayan sum in Töv province in June, 1994; three birds at Ih Bulangiin Lake of Binder sum in Hentii province on 30 July, 1994; two birds at Döröö Lake of Dornod province in August 2004); single adults at Telmen Lake of Zavkhan province, and Sharga Lake in Bulgan province (Kozlova, 1930; Bold, 1969; Dawaa *et al.*, 1994; Fomin & Bold, 1991; Gombobaatar, 1995; Gombobaatar, 1996; Sumiya *et al.*, 2000; Tsevenmyadag *et al.*, 2000; BirdLife International,

2001; Gombobaatar & Bold, 2002; Badley *et al.*, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag, 2005; Nyambayar & Tseveenmyadag, 2009). Three adult birds were seen in the same site of the wetland with dense grass 15 km north-west of Norovlin sum in Hentii province on 20 July, 2009 and 25 July, 2010 (S.Gombobaatar pers. comm. with photographs). P.Jargalsaikhan, a member of the Mongolian Ornithological Society and Mr A.Vaughan from Bird Finders colleagues found and photographed a single bird at Ögii Lake of Övörkhongai on 21 June, 2010 (P.Jargalsaikhan pers. comm.).

Population: The global population consists of 3,750 mature individuals. Global breeding and resident ranges are estimated at 107,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a rare non-breeding summer visitor and passage migrant. Summering birds and passage migrants are observed in lake and river valleys with reeds, and dense marshy grasses, swamps, pools and other type of wetlands. Passage migrants migrate through the country by early May –mid-May. Late migrants also occur in the east in early June. Summering birds spend all summer in wide river and lake valleys and marshes. They feed on insects (grasshoppers), amphibians, and roots, leaves and seeds of many different plants in summer. Summering birds and passage migrants leave their summering, refueling, and stop-over sites for wintering grounds by late August-early September.

Habitat Type: Potential habitats are 4. Grassland (4.4. on migration); 5. Wetlands (5.1. in valleys with tall vegetation, 5.4., 5.5. (in valleys with reeds and marshy grasses), 5.6., 5.14., 5.16., 5.17 (in valleys with reeds and marshy grasses on migration).

Dominant Threats: 1. Habitat Loss and Degradation(human-induced)- 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes (Gombobaatar, 1997; Gombobaatar, & Sumiya, 1998; Sumiya *et al.*, 2000).

1.3. Extraction-1.3.1. Mining: Gold and other mining, including uranium activities have directly and indirectly affected the species that feeds and rests at the river and lake.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and kayaking in the lakes and rivers where the species rests and refuels, are major threats, causing the species to abandon the site.

1.7. Fires: Steppe fires in spring and autumn burn the reeds and sedge grasses in lake and river valleys where the species occurs.

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of disturbance for the species.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important summering, stopover and refueling sites for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their feeding, resting and refueling habitats in eastern Mongolia.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region possibly prey upon the birds at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species.

10. Human disturbance-10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Transport by boat, car and horse near breeding areas have been negatively affecting the breeding and non-breeding individuals.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Very Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1995. Listed in CITES Appendix I. Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes
Family: Gruidae

131. Scientific Name: *Grus vipio*

Species Authority: Pallas, 1811

Common Names: White-naped Crane (English), Tsen togoruu (Mongolian)

Global Status: Vulnerable, A2ce+3ce

Regional Status: Vulnerable, A2 (ac); C

Rationale for Assessment: This species has been assessed as Vulnerable, because the number of individuals in Mongolia is estimated at 558. The population is likely to be declining as a result of habitat loss and degradation from overgrazing, steppe fires, drought and human disturbance. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable, D1

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Kazakhstan, China, Mongolia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species is mostly distributed in the north-eastern region of the country. It breeds in open lake and river valleys with tall marshy vegetation and reed beds, islands on lakes and rivers, and steppe lake surrounded by reeds (Ostapenko & Tseveenmyadag 1983; Fujita *et al.*, 1994; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Sumiya 1998; Goroshko & Tseveenmyadag 2001; Tseveenmyadag & Goroshko 2001; Gombobaatar & Bold, 2002; Goroshko 2002; Bold *et al.*, 2005; Bradter *et al.*, 2005&2007; Tseveenmyadag, 2005; Bradter *et al.*, 2002, 2005&2007; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) such as Binder Lake of Hentii province (one breeding pair, local people reported that a pair bred annually (Ostapenko & Tseveenmyadag, 1983); Kholboo Shar Lake of **Ömnödelger sum in Hentii province** (five juveniles banded in August, 1994 (Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005); Onon (breeding pairs) (Kozlova, 1930 & 1932; Stepanyan, 1975; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005); (tens of breeding pairs in June 1999) (O. A. Goroshko *in litt.* 1999); Barkh River valley of Hentii province (an important site for this species) (Tseveenmyadag, 1997); Dund Nomgon, Nagoon Lakes in Batshireet sum of Hentii province (one juvenile banded in August, 1994) (Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005); Saikhan River of Batshireet sum in Hentii province (one juvenile banded in August, 1994 (Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005); Khurkh River valley in Binder and Batshireet sums of Hentii province (one juvenile banded in July, 1994 (Gombobaatar, 1996; Tseveenmyadag, 2005); Khulst Lake in Khurkh Sangiin Aj Akhui of Hentii province (two juveniles banded in July, 1994) (Bold & Dulamtseren, 1981; Tseveenmyadag, 1998; Bold *et al.*, 1995; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005); Sain Eriin Khonkhoryn Ar Lake of Hentii province (two juveniles banded in July, 1994) (Tseveenmyadag, 1998; Gombobaatar, 1996; Tseveenmyadag, 2005); near Bayan-Adraga town of Hentii province (flock of 13 birds reported by local people at a steppe lake in July, 1981) (Ostapenko & Tseveenmyadag 1983); Ulz River basins (Kucheruk, 1977; Gombobaatar, 1995; Higoshi *et al.*, 1995; Ozaki & Baba, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005; Bradter *et al.*, 2002, 2005&2007); Bulangiin lake (one juvenile banded in July, 1994) (Tseveenmyadag, 1998; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005); Mongol Daguur Strictly Protected Area, part of the Dauria International Nature Reserve, a breeding ground for c.30 birds, unspecified years (Tseveenmyadag *in litt.* 1998); Ugtam Nature Reserve (an important site for this species, undated

(N. Tseveenmyadag, 1997); Galuut Lake of Dornod province (one adult in June, 1998), Angirt Lake at Chuluunhoroot sum of Dornod province (one juvenile banded in July, 1994) (Tseveenmyadag, 1998; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005; Bradter *et al.*, 2002, 2005&2007); Ulz River, near Bayan-Uul sum of Dornod province (seven pairs along 5-6 km length and 3 km width of the river valley in July, 1977) (Ostapenko & Tseveenmyadag, 1983); Ulz River at Gurvanzagal sum of Dornod province (one juvenile banded in July, 1994) (Tseveenmyadag, 1998; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005); Khalkh gol of Dornod province (found breeding in the late 1960s) (Bold *et al.*, 1995; Bold, 1997). It migrates through the breeding areas and Buyant River of Khovd province (Fomin & Bold, 1991); Khar-Uus Lake (Bold 1997); Bakhtakhiin river, Darkhad Depression of Hövsgöl province (Fomin & Bold, 1991); Aikhan Lake of Bulgan province of Selenge basin (Boldbaatar, 2003) (single birds) (Bold *et al.*, 1995); Kharbukh River (Fomin & Bold, 1991); Ögii Lake (more than 20 birds) (Batdelger, 1996); Kharaa River in N Mongolia (several seen with a flock of Common cranes *Grus grus* on autumn migration in 1924-1926 (Kozlova 1930 & 1932); Argun River (untraced) (found a breeding pair) (Kozlova 1932); Herlen River valley (an important site for this species) (Tseveenmyadag, 1997); Ulaan Lake of Dornod province (an important site for this species) (Tseveenmyadag, 1997); Barkh River in Batshireet sum of Hentii province (a pair with a chick in July, 1981) (Ostapenko & Tseveenmyadag, 1983); Shuus River valley, Hentii province (an important site for this species) (Tseveenmyadag *in litt.* 1997); Balj River in Dadal sum of Hentii province (Fomin & Bold, 1991); between Öndörkhaan town and Bayan-Ovoo sum (three adults on a small unnamed steppe lake in the Herlen valley in June, 1998) (A. Bräunlich *in litt.* 2000; BirdLife International, 2001); Döröö Lake (an important site for this species) (N. Tseveenmyadag *in litt.* 1998); Höh Lake of Ulz River in Dornod province (flock of 14 birds on the west shore in July, 1977) (Ostapenko & Tseveenmyadag, 1983); Döch River valley (an important site for this species) (Tseveenmyadag, 1997); Höh Lake of Dornod province (Bold, 1997); Khaichiin Tsagaan Lake (an important site for this species, undated (Tseveenmyadag, 1997; Nyambayar & Tseveenmyadag, 2009); Tsagaan-Ovoo sum of Dornod province (Bold, 1997); Tashgain Tavan Lake (an important site for this species) (N. Tseveenmyadag, 1997); Azarga River mouth into Tashgain Tavan Lake (flock of 6 birds near this river in July) (Ostapenko & Tseveenmyadag 1983); Sumiin Tsagaan Lake of Dornod province (an important site for this species, undated, proposed as a new Strictly Protected Area) (Tseveenmyadag, 1997); Nömrög Strictly Protected Area (rare breeding bird) (Tseveenmyadag, 1998); Eastern Mongolian Strictly Protected Area (very rare summer visitor but breeding not confirmed) (Tseveenmyadag, 1998); Baga Lake (an important site for this species), Godigor lake (an important site for this species) (Tseveenmyadag, 1997); Khalkh River (one adult in June, 1999) (Bräunlich, 2000; BirdLife International, 2001). Breeding birds found at Tsegeen Lake of Lun sum in Töv province in August, 2006; Tsegeen Lake of Lun sum in Töv province (a pair in August, 2007); Tsagaan Lake of Bayannuur sum (a pair in August, 2006); Sum Höh Burd of Adaatsag sum in Dundgobi province (breeding pair in April, 2002). Single birds were found in dry steppe at Bayanjargalan sum in Töv province together with Demoiselle crane and three Hooded cranes in April, 2003, seven birds at Kharbukh River of Tuul River basin in June, 2006 (S.Gombobaatar pers. comm. and photographs). One bird at Airag Lake of Uvs province on 19-20 and 23-24 September, 2006 (Bräunlich, 2006a); S Hövsgöl and Ganga Lakes of Suhbaatar province (N. Tseveenmyadag pers. comm.).

Population: The global population consists of 6,500 mature individuals. Global breeding and resident ranges are estimated at 746,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. However, 800 individuals breed and summer in Onon, Ulz, Balj and Herlen River valleys (Bold, 1997). Up to 40% of the global population of the species exists in Mongolia (MNE& JICA, 2001). The White-naped Crane in the Dauria is estimated as 1400 individuals, it is up to 23% of the global population (Goroshko, 2002).

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migrants arrive in the breeding site by mid-April. During the breeding season, they are found in wetlands along river valleys, grassy marshes, wet sedge meadows, and on islands of steppe lakes with reed beds. Fujita *et al.* (1994) found that White-naped Cranes prefer wet steppe areas (of which the Ulz River valley is part). Within this climate type, foraging areas of White-naped Cranes include wetlands, adjacent grasslands and cropland (Meine & Archibald 1996). Bradter *et al.* (2007) observations show that large parts of the daily used area of two

out of three pairs were dry. Although a few wet microhabitat features were present in these areas, the plots of focal bird locations do show a widespread use of the area rather than concentrations at points; wide areas of dry habitats are used for foraging. In autumn, they feed in dry areas in river valleys and wheat fields in Russia and Mongolia. Winter habitats consists of freshwater lakes, farmland, and sometimes coastal flats. They return to nesting sites of previous years and participate in a long and complicated set of coordinated calls, in amongst other crane species doing the same thing. The female initiates the display, in which both sexes extend their necks and lift their heads; the males utter one call for every two from the female. They build a stick nest of dried reeds, sedges and grass in open wetlands, amongst dense vegetation. One or two eggs with yellowish-green or pale greenish-yellow colour with dark brown, reddish-brown or bluish -brown spots and markings are incubated for 30 days between mid-April and mid-May. The male remains nearby and helps to build and defend the nest. Once the chicks have hatched in June or early July, the parents are less vigilant about defense, spending more time feeding the chicks. They fledge after 70 to 75 days and reach sexual maturity in their third or fourth year. During the breeding season, they feed on insects (grasshoppers) and aquatic invertebrates, worms, Siberian Wood Frog (*Rana amurensis*), Mongolian Toad (*Bufo raddei*), and the seeds, roots and tubers of sedges and other wetland plants. When the chicks are large enough, they prefer to feed in dry areas near reed beds, tall bushes and marshes (Ostapenko & Tseveenmyadag 1983; Fujita *et al.*, 1994; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Sumiya 1998; Goroshko & Tseveenmyadag 2001; Tseveenmyadag & Goroshko 2001; Gombobaatar & Bold, 2002; Bradter *et al.*, 2002; Bradter *et al.*, 2005; Tseveenmyadag, 2005; Bradter *et al.*, 2007; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Parental cranes spent $79.6 \pm 4.8\%$ (10 pairs, 2000 and 2001) of the daylight period foraging whereas pairs without juveniles spent only $60.3 \pm 14.0\%$ (three observation days of three pairs) of the daylight period foraging. Foraging time shows a slight but non-significant increase with chick age during the second and third week ($r_s = 0.401$, $P = 0.58$). Preening/resting for parental pairs was recorded during $4.4 \pm 1.9\%$ of the daylight period and during $24.3 \pm 11.1\%$ of the daylight period for non-parental cranes. Whereas pairs without chicks showed a bimodal foraging activity pattern, we didn't find any distinct behaviour pattern for pairs with chicks. Pairs without juveniles sometimes went to a shallow water body during midday for a period of resting and preening which we did not observe in parental cranes. With shorter days and older juveniles, pairs increasingly left the roosting site before sunrise ($r_s = 0.776$, $P < 0.001$) and returned after sunset ($r_s = 0.531$, $P = 0.006$). The size of the area used by crane families ranged from 11 to 155 ha per day. Pairs rearing juveniles used on average 65 ± 31 ha per day, pairs without juveniles 111 ± 35 ha. Two pairs used a composite area of 165 and 379 ha, respectively during observation days with chicks aged c. 15, 30, 55 and 65 days. Maximum recorded distance of a focal parental bird from the roosting site was 3030 m. Start and finish of daily movements was always the roosting site. Five pairs retained their nest site at the periphery of their minimum convex polygon. The sixth pair permanently moved to another wetland. This pair nested in a reed bed at the edge of a lake. Adjacent on the other side of the reed bed was a tiny wetland of c. 2 ha. During an observation day when the chick was c. 6 days old, the family was foraging in this wetland, but the male left to feed on an island and in a wetland (c. 150 – 200 ha) at the other side of the lake. During an observation day when the chick was c. 17 days old, and during subsequent observation days, the family foraged in the larger wetland and also used it as a roosting site. The move had necessitated a walk of about 2 km. One pair crossed the river twice between foraging area and roosting site during an observation day when the chick was c. 7-8 weeks old (Bradter *et al.*, 2007). Eastern Mongolian birds migrate to Poyang Lake, China within 26 days. The bird from Russian Daurian steppe flew through China, Korea and Japan (Higoshi *et al.*, 1995; Ozaki & Baba, 1995).

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1. in valleys with tall vegetation, 5.4., 5.5. (in valleys with reeds and marshy grasses), 5.6., 5.14., 5.16., 5.17 (in valleys with reeds and marshy grasses on migration); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: In Mongolia, White-naped Cranes nest in river valleys, along lake edges and in other wetlands, often in the vicinity of pastoral families. Habitat loss and degradation throughout the breeding range are critical threats to the species (Meine & Archibald 1996, BirdLife International 2001). Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands

and marshes. Habitat loss is one of the potential threats to the species in the country (Gombobaatar, 1997; Gombobaatar, & Sumiya, 1998; Sumiya *et al.*, 2000; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005). Overgrazing has become a serious problem in certain areas due to a considerable increase in livestock numbers and a shift from a nomadic to a more sedentary lifestyle (Oyun-Erdene, 1998).

1.3. Extraction-1.3.1. Mining: Gold and other mining including uranium activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation

1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and wetlands. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Steppe fires may burn breeding habitats near lakes and rivers in spring and autumn. Early spring and summer fires might burn their nests with eggs and occasionally young broods.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: In Ulaanbaatar, 4 birds were stuffed and placed in night club in 2007 for a show. Local owners of wheat fields along Ulz and Khurkh River valley occasionally shoot this species in order to kill and flush them from the fields.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against of Brandt's Vole (*Lasiopodomys brandti*) at feeding site of the species, is a cause of breeding and migrating species through the areas.

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations.

5. Persecution-5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Mongolia.

7.2. Storms or flooding-7.3. Temperature extremes: Nests located in the valleys of Ulz, Onon, Khurkh, Khalkh and other rivers in the west and reed shores of lakes have been destroyed by flood. Cold rains over several days and sudden temperature changes threaten the species, especially young chicks with pins (Gombobaatar, 1997; Gombobaatar, & Sumiya, 1998; Sumiya *et al.*, 2000; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005).

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region prey upon the eggs, flightless and slow-moving chicks at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities that pose a threat to this species' breeding areas include mining, haymaking, flooding and an increased frequency of steppe fires. Although at present, north-eastern Mongolia is relatively unspoiled by development, the Mongolian government has plans for large-scale agricultural development, as well as industrial and infrastructural projects.

10.4. Transport: Transport by boat, cars and horse, and near breeding areas have been negatively

affecting the breeding and non-breeding individuals. In recent years, local herders hay sedge grasses along lake and river valleys, because sedges grow taller and denser than any other plants along the valleys. Horsemen passing close to White-naped Crane families cause considerable disturbance. In one family, chick and parents were separated for up to 1.5 h by a passing horseman. Some of the lowest proportions of foraging time were recorded for this family in an area frequented by horsemen. Repeated disturbance of this level could lead to insufficient energy intake and consequently to reduced reproductive success (Bradter *et al.*, 2007). Many herdsman can identify White-naped Cranes and know if they have a pair or family in the vicinity. White-naped Cranes can usually be seen from a distance when on horseback. It would require relatively little effort for horsemen to avoid getting too close to a White-naped Crane family and they might willingly do so if made aware of the disturbance caused. Slow-moving herds did not cause any visible alarm of cranes and livestock grazing up to a certain stocking density might not be detrimental or even beneficial to cranes. We do not know whether livestock grazing itself has a positive or negative effect on food availability or accessibility (e.g. by reducing vegetation height) and these questions need to be answered before recommendations on grazing in White-naped Crane foraging areas can be given. Maximum distance of a focal animal to the sleeping place was 3030 m. If targeted measures for the protection of the White-naped Crane are to be implemented, they should be focused within c. 3 km of the sleeping place and nest site.

10.5. Fire: Fires also cause habitat destruction at nesting sites and can rapidly decimate nesting pairs. See 1.7.

Conservation Measures: Listed as Very Rare in the Mongolian Red Data Book (1987&1997) and included in the International Red Book. The species is listed in CITES Appendix I. It is covered under the Mongolian Hunting Law, 2000. Approximately 9.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Gruidae

132. Scientific Name: *Anthropoides virgo*

Species Authority: (Linnaeus, 1758)

Common Names: Demoiselle Crane (English), Övögt togiruu or övögt togoruu (Mongolian)

Synonyms: *Grus virgo* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Morocco, Portugal, Spain, Algeria, Nigeria, Norway, Germany, Italy, Denmark, Sweden, Czech Republic, Chad, Malta, Croatia, Hungary, Slovakia, Serbia, Greece, Romania, Finland, Sudan, Ukraine, Bulgaria, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Republic of Korea, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Japan. It is regionally extinct in Tunisia.

Regional Distribution: This species breeds at Mongol-Altai and Gobi-Altai (less than 2,200 m asl), most areas of Great Lakes Depression, all open habitats of Khangai, Hentii, Hövsgöl Mountain Ranges, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Northern Gobi, and Eastern Gobi Depression. It migrates through the breeding areas and most open habitats of the country (except for taiga forest, alpine and subalpine zones of high mountains). Large flocks consisting of 4,000 to 8,000 individuals occur along steppe lakes and wheat fields on migration (Dorogostaiskii, 1908; Tkachenko, 1920; Tugarinov, 1929; Tugarinov, 1932; Berezovskii, 1937; Sushkin, 1938; Kozlova, 1930; Pevtsov, 1951; Eregdendagva 1960; Bold, 1969; Smirenskii *et al.*, 1988; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Fujita *et al.*, 1994; Bold *et al.*, 1995; Gombobaatar, 1995; Gombobaatar, 1996; Simbun, 1996; Yutaka *et al.*, 2000; Gombobaatar & Bold, 2002; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Gombobaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 230,000 - 280,000 mature individuals. Global breeding and resident ranges are estimated at 9,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. First migrants are seen at Sharga Gobi, Tuul River Valley, West Hentii, the Valley of the Lakes and Great Lakes Depression by the end of April. Major migrations in the west cover Bulgan and Uyench River Valleys and Mongol-Altai Mountains; in the central region, Orkhon, Selenge, Tuul and Kharaa Rivers, and the eastern region 115°-118°. Its breeding habitat differs among regions. In central and western Mongolia, pairs nest in dry steppe. In southern Mongolia, they breed in gravelly arid steppe near a water source, while non-breeders gather in flocks near lakes, rivers and pools over the summer. Most individuals prefer dry open habitats near lakes and rivers, hillside, slopes, tops of hills, mountain valleys and wheat fields. Fujita *et al.* (1994) showed that in eastern Mongolia this species selects dry steppe with sparse short vegetation, and wet meadows of the lake and river valleys. From field observations, occurrence and density of breeding pairs are apparently higher near local herders than in more remote areas. This pattern is probably associated with security from predators like Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*), Steppe Eagle and Golden Eagle. These predators take eggs and young chicks during day and night. Traditionally, local herders never touch eggs and chicks of migratory birds including cranes, due to a belief that touching brings bad luck. On several occasions breeding pairs were found nesting as close as 60-100 m to a herder family. The species is monogamous. Breeding pairs display or dance actively after their arrival. They nest on the ground in shallow hollows filled with gravel in areas of short vegetation in forest steppe, mountain steppe, desert steppe and plains (Ostapenko & Tseveenmyadag 1983; Fujita *et al.*, 1994; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Bold *et al.*, 2005; Tseveenmyadag, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). By early May, females lay their 2 (rarely 3) eggs of slightly glossy, pale buff, olive grey, buffish brown or olive-buff colour, with dark brown, reddish-brown or purplish-grey blotches and spots. Both sexes (but mostly the females) incubate the eggs for 28-30 days. Both adults brood and feed chicks with grasshoppers, worms, roots, leaves, buds and flowers. Broods can fly at 55-56 days. If predators or human beings are close to eggs and young chicks, either adult may divert attention by imitating broken-winged birds, leg-injured individuals, or just lying on the ground as though dead. Breeding success differs across regions due to weather conditions including spring winds and chill, disturbance by cattle and predators, and nest failure. Before autumn migration, large flocks consisting of 2,000-4,500 individuals feed on wheat grain in wheat fields. Satellite tracking by Simbun (1996) showed that birds from western Mongolia (Khovd Province) migrated over the Himalayas (reaching over 9000 m asl) to winter in India. Some birds from Russian Dauria and eastern Mongolia winter in China. Autumn migration begins by the third week of August and terminates by early December in the east.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (5.1., 5.4., 5.5., 5.7., valleys with reeds and sedge grasses, 5.9. on migration); 8. Desert (8.2., 8.3. on migration); 11. Artificial - Terrestrial (11.3. on migration); 12. Artificial - Aquatic (12.2., 12.9. on shore on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying grasslands and reed beds near the freshwater lakes and pools where this species breeds. Habitat loss is one of the potential threats to the species in the country (Gombobaatar, 1997; Gombobaatar & Sumiya, 1998; Sumiya *et al.*, 2000; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005). 1.3. Extraction-1.3.1. Mining: Gold and other mining, including uranium activities, directly and indirectly affect breeding success at rivers and lakes contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults are the major threats, causing the species to abandon the site and move to other lakes and wetlands and increasing mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the Great Lakes Depression watershed: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. Subsequent to dam construction, the Zavkhan River dried up. The recent drought has made significant changes to Airag and Zost Lakes and to the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. These changes threaten breeding and non-breeding birds through habitat loss.

1.7. Fires: Steppe fires burn breeding habitats near lakes and rivers in spring and autumn. Early spring and summer fires may burn nests containing eggs or young broods.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: In Ulaanbaatar, stuffed specimens of the species are often found in public service areas. Local owners of wheat fields along the Ulz and Khurkh River valleys occasionally shoot the species in order to flush them from crop fields.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against Brandt's Vole (*Lasiopodomys brandti*) at feeding sites of the species is a threat to breeding and migrating populations throughout the area (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision-4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during autumn and spring migrations. Dead birds were found under a pole of the 15 KV power line in Central Mongolia. This species is one of the birds most often electrocuted on 15 KV lines (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011).

5. Persecution-5.1. Pest control: Pesticide used in forested areas (against insects like Siberian Moth) is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of reduced breeding success associated with habitat changes.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites for this species. Due to consecutive years of drought, important sites have dried out and the birds have been losing Mongolian breeding, resting, roosting and refueling habitats.

7.2. Storms or flooding-7.3. Temperature extremes: Nests located in the valleys of the Ulz, Onon, Khurkh, Khalkh and other western rivers and reedy lake shores were destroyed by flood. Persistent cold rains and sudden temperature changes are threats, especially to young chicks with pins (Gombobaatar, 1997; Gombobaatar, & Sumiya, 1998; Sumiya *et al.*, 2000; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005).

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Steppe Eagle, Golden Eagle, Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) prey upon the eggs and the flightless, slow-moving chicks in fields.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species.

10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities posing a threat to this species' breeding areas include mining, haymaking, flooding and the increased frequency of steppe fires. At present, northeastern Mongolia is relatively unspoiled by development, but the Mongolian government plans large-scale agricultural development and industrial and infrastructure projects.

10.4. Transport: Transport via boat, car and horse near breeding areas have been negatively affecting breeding and non-breeding individuals. In recent years, local herders have begun haying sedge grasses along lakes and rivers. Sedges grow taller and denser than any other plants along the valleys.

10.5. Fire: Fires destroy habitat nesting sites and decimate nesting pairs. See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Gruidae

133. Scientific Name: *Grus grus*

Species Authority: (Linnaeus, 1758)

Common Names: Common Crane or Eurasian Crane (English), Kharkhiraa togoruu (Mongolian)

Subspecies in Mongolia: *G. g. lilfordi* (see Howard & Moore (1994); Meine and Archibald (1996); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because although it is not currently threatened, it is likely to undergo significant habitat loss and degradation through steppe fires, overgrazing and drought. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Canada, United States, Iceland, Mauritania, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Palestinian Territory Occupied, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Lao People's Democratic Republic, Viet Nam, Cambodia, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan. It is regionally extinct in Austria, Montenegro, and Serbia.

Regional Distribution: This species breeds at Achit and Uureg Lakes, delta Böhmörön (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin and Torkholig Rivers (Northern Uvs Depression); Khar-Us and Khar Lakes (Great Lakes Depression); Zavkhan River with reed beds (Jargalant sum); Orkhon River (Khangai Mountain Range); Hövsgöl and Darkhad Depression (Hövsgöl region); Selenge and Yeröö Rivers (Orkhon-Selenge River basins); upper Kharaa, Tuul, Herlen, Onon and Balj Rivers (Hentii Mountain Range); Herlen River valley (Middle Khalkh Steppe); Ulz River basin (Mongol Daguur Steppe). It migrates through the breeding territories and Great Lakes Depression, Valley of the Lakes, Bulgan River valley (Dzungariin Gobi), upper Orkhon River, and Sangiin Dalai and Ögii Lakes (Khangai Mountain Range); Terhiin Tsagaan, Sangiin Dalai, Telmen, Khar Lakes (Tarvagatai-Bulnai Mountains);

lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Khalkh, Degee, Nömrög, Tsagaan Chuluut, Mogoit, Azarga and Galdastai Rivers, and Buir, Shavar, Tashgain Tavan and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes, and Tsagaan and Urt Rivers (Valley of the Lakes); Bulgan River valley (Dzungariin Gobi) (Kozlova, 1930; Sushkin, 1938; Bold, 1973; Sumiya, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold *et al.*, 1995; Gombobaatar, 1995; Gombobaatar, 1996; Tseveenmyadag *et al.*, 2000; Gombobaatar, 2002; Gombobaatar & Bold, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Badley *et al.*, 2005; Bold, 2005; Boldbaatar, 2003 Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 360,000 - 370,000 mature individuals. Global breeding and resident ranges are estimated at 15,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. First migrants were observed in Khangai Mountain ranges, Orkhon and Ulz River valleys by early April. Mass migration occurs by mid-April. Migration flocks consist of 20-300 individuals. They stay in wheat fields in Orkhon, Tuul, Selenge, Kharaa, Onon, Khurkh and Ulz River valleys for short periods on spring migration. Breeding habitats are marshy lake and river valleys, and edge of forest steppe with reeds, scattered bushes, and small willows in remote areas. Sometimes they breed in reed beds near fresh water pools, ponds, and lakes. Both sexes build a large stick nest on the ground of reeds, long twigs and dried grasses in lake and river valleys with tall marshy vegetation and dense reed beds (Gombobaatar, 1996; Gombobaatar & Bold, 2002; Bold *et al.*, 2005; Tseveenmyadag, 2005; Tseveenmyadag *et al.*, 2010). Non-breeders and breeders stay in meadows and wetlands with reeds, and dense and tall sedges in summer. It is a monogamous species. Female lays 1-2 eggs of light glossy, yellowish-green or pale-greenish yellow colour with dark brown and reddish-brown spots, blotches and markings. Both male and female incubate the two eggs, which hatch after 28 to 31 days. Chicks remain 1-3 days in the nest and then leave the nest. Parents feed these young chicks with insects and their larvae, roots and green leaves. Later they can find their own food. The chicks have brown plumage, and fledge at around 65 to 70 days, but take between 4 and 6 years to reach maturity. In spring and summer, they eat roots, aquatic plant fruits, buds, blooming flowers, vegetative parts of green plants, and green leaves, and insects, worms, molluscs, other invertebrates, Siberian Wood Frog (*Rana amurensis*) and Mongolian Toad (*Bufo raddei*). In autumn, they feed on roots, leaves, insects, seeds, and wheat grains in wheat fields in Mongolia. Every two years, before migration, the adult Common Crane undergoes a complete moult, remaining flightless for six weeks, until the new feathers grow. Autumn migration begins by end of August. Large flocks of 200-500 individuals (MNE & JICA, 2001) form along wheat fields in the areas mentioned above. Intensive autumn migration was recorded in the areas and Great Lakes Depression by mid-September.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1. in valleys with tall vegetation, 5.4., 5.5. (in valleys with reeds and marshy grasses), 5.6., 5.14., 5.16., 5.17 (in valleys with reeds and marshy grasses on migration); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes. Habitat loss is one of the potential threats to the species in the country (Gombobaatar, 1997; Gombobaatar, & Sumiya, 1998; Sumiya *et al.*, 2000; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005).

1.3. Extraction-1.3.1. Mining: Gold and other mining including uranium activities have directly and indirectly affected breeding success of the species at the rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation

1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species breeds and moults, are major threats, causing the species to abandon the site and to move to neighbouring lakes and wetlands. This may increase the species' mortality rate.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono KharaiKh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, sedge grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through habitat loss.

1.7. Fires: Steppe fires may burn breeding habitats near lakes and rivers in spring and autumn. Early spring and summer fires might burn their nests with eggs and occasionally young broods.

3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities-3.5.1. Subsistence use or local trade: Some people like to collect and stuff them for display in public service places.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.

4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against of Brandt's Vole (*Lasiopodomys brandti*) at feeding site of the species, is a cause of breeding and migrating species through the areas (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005).

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations

5. Persecution-5.1. Pest control: Pesticide used in forested areas against insects like Siberian Moth is a potential threat to the species (see 4.1.2.3.).

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important breeding sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Mongolia.

7.2. Storms or flooding-7.3. Temperature extremes: Nests located in the valleys of Ulz, Onon, Khurkh, Khalkh and other rivers in the west and reed shores of lakes have been destroyed by flood. Cold rains over several days and sudden temperature changes are threats to the species, especially young chicks with pins (Gombobaatar, 1997; Gombobaatar, & Sumiya, 1998; Sumiya *et al.*, 2000; Gombobaatar & Bold, 2002; Tseveenmyadag, 2005).

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon the eggs, flightless and slow-moving chicks at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Transport by boat, car and horse near breeding areas have been negatively affecting the breeding and non-breeding individuals. In recent years, local herders hay sedge grasses along lake and river valleys, because sedges grow taller and denser than any other plants along the valleys.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix II. Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes
Family: Gruidae

134. Scientific Name: *Grus monacha*

Species Authority: Temminck, 1835

Common Names: Hooded Crane (English), Khar togoruu (Mongolian)

Global Status: Vulnerable, B2ab(i,ii,iii,iv,v); C2a(ii)

Regional Status: Vulnerable, A2(ac); C2a(i).

Rationale for Assessment: This species has been assessed as Vulnerable, D1, because the number of mature individuals in Mongolia is estimated at 700-900. The population is likely to be declining as a result of habitat loss and degradation from overgrazing, steppe fires, drought and human disturbance. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable, D1

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Kazakhstan, India, China, Mongolia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species summers and migrates through lake and river valleys, wheat fields and rarely dry steppe (Ostapenko & Tseveenmyadag 1983; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Bold *et al.*, 2005; Tseveenmyadag, 2005; Bradter *et al.*, 2002, 2005&2007; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). It has recorded at Zavkhan River of Zavkhan province (three birds with Common Cranes) (Bold *et al.*, 1995); Urd Tamir River of Arkhangai province (a summer visitor) (Bold, 1997); Ögii Lake (a summer visitor) (Tsegmid & Uuganbayar, 2006) (Batdelger, 1996); 8 km west of Hutag-Öndör of Bulgan province (two birds on a damp meadow in July, 1996 (BirdLife International, 2001); Ongiin River of Övörkhangai province, west of Arvaiheer town (five birds with Common cranes in April, 1974) (Bold, 1981; Bold & Dulamtseren, 1975; Bold *et al.*, 1985; Bold *et al.*, 1995); Tashgain Tavan Lake (an important site for this species) (Tseveenmyadag, 1997); Orkhon and Tamir Rivers of Selenge province (a summer visitor) (Bold, 1981; Bold & Dulamtseren, 1975; Bold *et al.*, 1985; Bold, 1997); Tsagaan sum valley of eastern Hentii (seven birds in June, 1971); Ar Khonkhor Lake of Norovlin sum in Hentii province (Gombobaatar, 2002) (Bold *et al.*, 1995); Galuut Lake of Dornod province (flock of six in May, 1999) (A. Bräunlich, 2000; BirdLife International, 2001); Mongol Daguur Strictly Protected Area (a migration stopover ground for up to 400 birds) (Tseveenmyadag, 1997); Döch River valley (an important site for this species) (Tseveenmyadag, 1997); Ulz River valley (flock of 43 birds near crop fields by salt lakes south of the river in June 1987) (Bold *et al.*, 1995), at Ulz agricultural area (over 700 birds estimated in spring 1990, 2,079 in 1991, 107 in 1992 and 1,891 in 1994, including over 1,000 birds seen together at the end of September, 1994) (Bold, 1997); Ugtam Nature Reserve (an important site for this species) (Tseveenmyadag, 1998); Khaichiin Tsagaan Lake (an important site for this species) (Tseveenmyadag, 1997); Herlen River valley (an important site for this species) (Tseveenmyadag, 1997); Sumberiin Tsagaan Lake (Sumiin Tsagaan Lake) (an important site for this species) (Tseveenmyadag, 1997); Döröö Lake of Ulz River in Dornod province (24 birds in April 1987, with more than 700 birds in a field just north of the lake in April 1990, and 2,079 birds in the same area in April–May, 1991) (Bold *et al.*, 1995); (flock of five in May, 1999) (Bräunlich, 2000; BirdLife International, 2001); a pair at low stream of Khoroo River of Hövsgöl Lake (Sumiya & Skryabin 1989). Three birds were observed in dry steppe at Bayanjargalan sum, Töv province together with a Demoiselle Crane flock and one bird at Sharga Lake of Bulgan province on 22 August, 2010 (April, 2003) (S. Gombobaatar, pers. comm.); Ulz River, Tari, Döröö Lakes and Mongol Daguur Steppe (Sushkin, 1938; Kozlova, 1930; Bold, 1969; Bold, 1973; Bold & Dulamtseren, 1975; Bold, 1981; Bold *et al.*, 1985; Sumiya & Skryabin 1989;

Fomin & Bold, 1991; Dawaa *et al.*, 1994; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Gombobaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Badley *et al.*, 2005; Boldbaatar, 2005a; Tseveenmyadag, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Nyambayar & Tseveenmyadag, 2009). Eight individuals were seen at Orog Lake of Bayankhongor province in June 2008 (Kh.Terbish pers. comm.).

Population: The global population consists of 2,500-9,999 mature individuals. Global breeding and resident ranges are estimated at 1,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. A total of 700 individuals regularly summered in wheat fields along Ulz River valley in 1990, 2,079 in 1991, 107 in 1992 and 1,891 in 1994. Due to cessation of wheat field cultivation, the number of the species has dropped to 30-100 individuals in the areas (MNE & JICA, 2001).

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a non-breeding summer visitor and passage migrant. The summer visitors and passage migrants arrive in the summering and stop-over sites mid-April-mid-May. Hooded Cranes move to the breeding grounds in pairs or small flocks between April and May. This species can breed in forest wetlands of the Darkhad Depression and Hentii Mountain. In eastern Mongolia, they summer in marshy areas near pools, ponds and river valleys with reeds and sedge grasses. Individuals mature at three to four years. On autumn migration they tend to stay in wheat fields with White-naped and Demoiselle Cranes. At some wheat fields in Ulz and Khurkh River valley, over 700 birds were seen in spring 1990, 2,079 in 1991, 107 in 1992 and 1,891 in 1994, including over 1,000 birds seen together at the end of September of 1994 (Bold, 1997). These numbers are the highest in the country, as a result of the birds from northern breeding grounds joining with Mongolian birds in these fields. The Hooded eats berries, roots and seeds of plants, insects, Siberian Wood Frog (*Rana amurensis*). During the winter, 80 percent of the population feeds at the special artificial feeding station in Izumi, Japan, where they are fed cereal grains. They leave Mongolia for wintering grounds by late September-early October, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1. valleys with tall vegetation), 5.4., 5.5. (valleys with reeds and sedge grasses), 5.6., 5.14., 5.16., 5.17 (valleys with reeds and marshy grasses on migration); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat loss and degradation -1.1.4. Livestock-1.1.4.1. Nomadic: Hooded Cranes summer in river valleys, along lake edges and in other wetlands, often in the vicinity of pastoral families. Habitat loss and degradation throughout the breeding range are critical threats to the species. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining including uranium activities have directly and indirectly affected the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation

1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes where the species refuels and summers, are major threats to the species.

1.7. Fires: Steppe fires may burn breeding habitats near lakes and rivers in spring and autumn.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.3. Poisoning: Rodenticide, like Bromadilone used against of Brandt's Vole (*Lasiopodomys brandti*) at feeding site of the species, is a cause of migrating species through the areas.

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to this species all over Mongolia during the autumn and spring migrations.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a cause of low breeding success of the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are summering and refueling sites of the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting and refueling habitats in Mongolia.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region potentially prey upon them at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities that pose a threat to this species' summering and feeding areas include mining, haymaking, flooding and an increased frequency of steppe fires.

10.4. Transport: Transport by boat, car and horse near breeding areas have been negatively affecting the non-breeding individuals. In recent years, local herders hay sedge grasses along lake and river valleys, because sedges grow taller and denser than any other plants along the valleys. Horsemen passing close to the species cause considerable disturbance.

10.5. Fire: Fires also cause habitat destruction at nesting sites and can rapidly decimate nesting pairs. See 1.7. **Conservation Measures:** Listed as Very Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1995. It is listed in CITES Appendix I. Approximately 10.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Gruidae

135. Scientific Name: *Grus japonensis*

Species Authority: (Muller, 1776)

Common Names: Red-crowned Crane or Japanese Crane (English), Alag togoruu (Mongolian)

Global Status: Endangered, C1

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as very rare rare summer visitor and passage migrant. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: Ch.Uuganbayar (MSUA&MOS, Mongolia), J.Bird (BI, UK), I.Fefelov (ISU, Russia), T.Ikeuchi (FGP, Japan), E.Unurjargal (MOS, Mongolia), and U.Tuvshin (MOS, Mongolia).

Global Distribution: Russian Federation, China, Mongolia, Japan, Democratic People's Republic of Korea, Republic of Korea, It is considered vagrant in Taiwan.

Regional Distribution: A.I.Ivanov found two birds in a valley of Khalkh River near Sumber sum of Dornod province on 1 September, 1928 (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Tseveenmyadag, 2005). Individual birds have also been observed at Herlen River valley (near Hölönbuir sum, May 1995) (German-Mongolian Expedition Dornod, 1995; Gombobaatar, 1995; Gombobaatar, 1996; Gombobaatar & Bold, 2002) and Ulz Gol (E Dashbalbar sum of Dornod province, July 2000) (U.Bradter and S. Gombobaatar pers. comm.). A single bird was recorded at Binder Lake (N. Tseveenmyadag pers. comm., 2008). There was at least one nesting record (at an unspecified locality) in Mongolia in the 1920s (Meine & Archibald 1996), but it is now a very rare non-breeding visitor to the east of the country, with records in Khalkh River in Dornod province in September, 1967 (Bold *et al.*, 1995; BirdLife International, 2001).

Population: The global population consists of 1,700 mature individuals. Global breeding and resident ranges are estimated at 551,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a rare non-breeding summer visitor and passage migrant. There are only a few records (see the above "Regional Distribution") in eastern Mongolia. The species arrives

in summering site and migrates through eastern Mongolia by late May - early June (spring migration). They leave their summering sites and migrate through eastern Mongolia for wintering grounds by late August-early September. They feed on various plant matter such as seeds, buds, and roots, invertebrates (grasshoppers, beetles, earthworms) and vertebrates (young frogs and toads).

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1. in valleys with tall vegetation, 5.4., 5.5. (in valleys with reeds and marshy grasses), 5.6., 5.14., 5.16., 5.17 (in valleys with reeds and marshy grasses on migration).

Dominant Threats: 1. Habitat Loss and Degradation(human-induced)- 1.1.4. Livestock-1.1.4.1. Nomadic: Livestock have been grazing and destroying reed beds near freshwater lakes and pools where this species feeds. Overgrazing of livestock in wetlands, marshes and reed beds near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes (Gombobaatar, 1997; Gombobaatar & Sumiya, 1998; Sumiya *et al.*, 2000; Tseveenmyadag, 2005).

1.3. Extraction-1.3.1. Mining: Gold and other mining, including uranium activities have directly and indirectly affected the species that feeds and rests at the river and lake.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation

1.4.5. Transport water: Ecotourism development, human settlement, tourist camps and kayaking in the lakes and rivers where the species rests and refuels, are major threats, causing the species to abandon the site.

1.7. Fires: Steppe fires in spring and autumn burn the reeds and sedge grasses in lake and river valleys where the species occurs.

6. Pollution (affecting habitat and species)- 6.3. Water pollution: Domestic water pollution is a cause of disturbance for the species.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with reed beds in Mongolia are important summering, stopover and refueling sites for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their feeding, resting and refueling habitats in Eastern Mongolia.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region possibly prey upon the birds at night.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species.

10. Human disturbance-10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Transport by boat, car and horse near breeding areas have been negatively affecting the breeding and non-breeding individuals.

10.5. Fire: See 1.7.

Conservation Measures: Listed in CITES Appendix I. Approximately 10.5% of the species' range in Mongolia occurs within protected areas. Hunting is prohibited by the Hunting Law (1995) in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Gruiformes

Family: Turnicidae

136. Scientific Name: *Turnix tanki*

Species Authority: Blyth, 1843

Common Names: Yellow-legged Buttonquail (English), Gurvan shivnuurt (Mongolian)

Subspecies in Mongolia: *T. t. blanfordi* (see Howard & Moore (1994) and Madge & McGowan (2002) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: M.Stubbe (HWU, Germany), N.Batsaikhan (NUM, Mongolia), Kh.Munkhbayar (MSUE, Mongolia), D.Usukhjargal (HNP & MOS, Mongolia), B.Gantulga (MOS, Mongolia), D. Batmunkh (MOS, Mongolia), and Valentin Schatz (MOS, Germany).

Global Distribution: Russian Federation, Pakistan, India, China, Nepal, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species has been observed in the Ulz River valley of Dornod province (Dawaa *et al.*, 1994). S. Gombobaatar (NUM & MOS) and German biologists found two legs of the species as prey remains in the nest of an Upland Buzzard. The buzzard nest contained two chicks near Nömrög River of Dornod province (at 47°01N'; 119°22E') in June, 1995 (German-Mongolian expedition Dornod, 1995).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 9,320,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it might be a breeding visitor. However, there is no proof for its breeding. According to our observation in the valley of Nömrög River and meadow with tall grasses and shrubs, it possibly breeds there. Most birders and researchers overlook them in the area. They feed on seeds and green parts of various plants. This species might arrive in breeding sites by late April-early May in spring and leave its breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: Potential habitats are 3. Shrub-land (3.4.); 4. Grassland (4.4.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock at breeding sites is a cause of habitat degradation.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, and tourist camps near breeding and non-breeding sites are major threats to the species.

1.7. Fires: Steppe fires may burn nests with eggs and young broods.

4. Accidental mortality-4.1.2. Terrestrial-4.1.2.3. Poisoning: Insecticides used against insects like Siberian Moth cause individual poisoning through the food chain and low breeding success of the species in both breeding and non-breeding sites.

5. Persecution-5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.1.1. Global warming-6.2. Land pollution -6.2.2. Domestic: Global warming and domestic land pollution are potential threats causing low breeding success for the species, associated with habitat change.

7. Natural disasters- 7.1. Drought: The drought leads to changes in feeding and non-breeding habitats associated with vegetation degradation.

7.2. Storms or flooding-7.3. Temperature extremes: These are dominant threats to the species, possibly eggs and young chicks.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Upland Buzzard, Northern Goshawk, Saker Falcon, Eurasian Hobby, Golden and Steppe Eagles, Grey Wolf (*Canis lupus*) and Red Fox (*Vulpes vulpes*) prey upon adult birds in breeding and autumn periods.

10. Human disturbance- 10.1. Recreation and tourism: Tourist and mineral mining camps threaten the species.

10.4. Transport: Busy roads near breeding and wintering sites have negatively affected the individuals that breed and winter there.

10.5. Fire: See 1.7.

Conservation Measures: This species occurs in the Nömrög and Mongol Daguur Strictly Protected Areas and Important birds areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Burhinidae

137. Scientific Name: *Burhinus oediconemus*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Thick-knee or Eurasian Stone-curlew (English), Egel sharandan (Mongolian)

Subspecies in Mongolia: *B. o. oediconemus* (see Prater *et al.* (1997) and Message & Taylor (2005) for further details)

Synonyms: *Oediconemus crepitans* Temminck, 1815

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Iceland, Senegal, Western Sahara, Mauritania, Guinea, Morocco, Sierra Leone, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Czech Republic, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, It is regionally extinct in Slovenia.

Regional Distribution: A single bird was found near Khar-Us Lake of Khovd province (Great Lakes Depression) in June, 1993 (Tseveenmyadag & Bold, 2006). One individual was recorded at Uvs Lake in Uvs Lake Depression during the breeding season (Zabelin, 1993).

Population: The global population consists of 130,000 - 310,000 mature individuals. Global breeding and resident ranges are estimated at 14,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a vagrant in Mongolia. There are only two records in the Great Lakes Depression. It inhabits lake shores and river banks with sandy beaches on migration. Birds are also found in open habitats with sparse vegetation. The species passes through western Mongolia by May (on spring migration) and late August-early September (on autumn migration).

Habitat Type: Potential habitats are 4. Grassland (4.4.); 5. Wetlands (5.1., 5.2., 5.5., 5.6., 5.9. with sparse vegetation and on shore and river banks on migration); 8. Desert (8.2. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/,

1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe fires in spring and autumn dry seasons burn feeding sites/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Particular conservation actions have not been taken for the species in the country. However, the species passes through protected areas like Uvs Lake Basin and Important Bird Areas in western Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Recurvirostridae

138. Scientific Name: *Himantopus himantopus*

Species Authority: (Linnaeus, 1758)

Common Names: Black-winged Stilt (English), Egel Hilenjiguur or hilenjiguurt (Mongolian)

Subspecies: *H.h.himatopus* Linnaeus, 1758

(see Howard & Moore (1994&2003); Prater *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Republic of, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic,

Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Uvs Lake and the delta of the lake; Airag, Achit, Khar, Khar-Us Lakes, Tes and Torkholig Rivers (Northern Uvs Depression); 30 km north-east of Gurvanzagal sum, Dornod province; lakes in south-eastern Khangai Mountain Range including Ögii, Terhiin Tsagaan, Bööntsagaan and Taatsyn Tsagaan Lakes (Valley of the Lakes). Two breeding pairs with chicks were documented in the wetland of Borogchin Lake of Bayannuur sum of Bulgan province in July, 2010 (S.Gombobaatar pers. comm. and photographs). It migrates through the breeding areas, small lakes and wetlands in Great Lakes Depression, Khangai Mountain Range, including Tarvagatai and Bulnai Mountains, Orkhon-Selenge River basins, Hentii Mountain Range, Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Fischer, 1970; Ostapenko *et al.*, 1980; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Smirenskii & Sumiya, 1991; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 450,000 - 780,000 mature individuals. Global breeding and resident ranges are estimated at 30,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. They arrive in breeding sites by late April-early May. Breeding season continues from May-July. They breed on shores, mudflats and grassy swamps near lakes and rivers in lake valleys and wetlands (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow with variable plant materials on a plant tuft or tussock in water or in very shallow water, or on mud by the water edge. The female usually lays 4 (3-5) eggs of slightly glossy, pale brownish-buff colour with small black spots and blotches. Both sexes incubate the eggs for 25-26 days. Both parents brood, guard and feed the young just after hatching. Soon they can find their own food. They feed on adult and larval aquatic insects (Coleoptera, Ephemeroptera, Trichoptera, Hemiptera, Odonata, Diptera, Neuroptera and Lepidoptera), molluscs, crustaceans, and spiders. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial - Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 10.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Recurvirostridae

139. Scientific Name: *Recurvirostra avosetta*

Species Authority: Linnaeus, 1758

Common Names: Pied Avocet or Avocet (English), Alag eeten or eeten (Mongolian)

Subspecies in Mongolia: *R. a. avosetta* (see Dawaa *et al.* (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009- Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Mali, Liberia, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Republic of Korea, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Qatar, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Japan, It is regionally extinct in Turkmenistan.

Regional Distribution: This species breeds at Uvs Lake (Northern Uvs Depression); Khar-Uvs, Khar, Dörgön, Khyargas Lakes and the delta of Khovd River (Great Lakes Depression); lakes in southern Shargyn Gobi, Bayan Lake, Santmargad sum, Zavkhan province, Sangiin Dalai, Telmen, Oigon, Sharga, Khunt, and Erhil Lakes (Khangai Mountain Range); Borogchin and Töhöm Lakes (Hentii Mountain Range), Shavart and Tsagaan Lakes in the valley of Ulz River, Dornod province. It migrates through the breeding areas, lake shores, river banks and other wetlands in the Mongol-Altai Mountain Range (including Kharkhiraa and Turgen Mountains), Zavkhan Desert Steppe Depression, Southern Khangai Plateau, Tarvagatai and Bulnai Mountain Ranges, Hövsgöl Mountain Range, including Darkhad Depression, Orkhon-Selenge River basins, Hentii Mountain Range, Mongol Daguur Steppe and Middle Khalkh Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression; oases and lakes in the Trans-Altai Gobi, Northern and Eastern Gobi (Kozlova, 1930; Tarasov, 1960; Fischer, 1970; Bold, 1973; Kleinstäuber & Succow, 1978; Ostapenko *et al.*, 1980; Piechocki *et al.*, 1981; Mauersberger 1980 & 1982; Potapov, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Simirinskii & Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag &

Bold, 2005; Tseveenmyadag *et al.*, 2005; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 210,000 - 460,000 mature individuals. Global breeding and resident ranges are estimated at 15,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. They nest in open areas on sandy bare shores and mud flats, sometimes muddy and boggy areas in lake valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They nest colonially. The nest is a shallow hollow lined with very sparse plant materials or none. The female lays 4 (3-5) eggs of slightly glossy, pale brownish-buff colour with small black spots, blotches and greyish markings. Both sexes incubate the eggs for 24-26 days. After hatching, chicks follow the parents. Both parents brood the chicks. Diet consists predominantly of aquatic invertebrates including aquatic insects, small beetles, midges, crustaceans, oligochaete and polychaete worms, and molluscs. On autumn migration, adult and non-migrants form large migrating flocks consisting of 20-400 individuals in the country. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability, weather conditions and threats.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migrations); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 7.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Charadriidae

140. Scientific Name: *Vanellus vanellus*

Species Authority: (Linnaeus, 1758)

Common Names: Northern Lapwing (English), Umardyn khavtgaalj or khavtgaalj (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Bahamas, Turks and Caicos Islands, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Brunei Darussalam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Mongol-Altai Mountain Range, Great Lakes Depression, Desert steppe depression in Zavkhan valley, Khangai Mountain Range, Southern Khangai Plateau, Hövsgöl Mountain Range (including Darkhad Depression), Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan Region, Valley of the Lakes and Baruunkhurai Depression. It passes through the breeding areas, steppe lake shores, river banks and oases in the Northern, Trans-Altai, Alashani and Eastern Gobi on migration (Potanin, 1883; Buturlin, 1913; Bold, 1973; Sumiya, 1973; Skryabin *et al.*, 1976; Kozlova, 1930&1932; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Nyambayar & Tsevenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 5,200,000 - 10,000,000 mature individuals. Global breeding and resident ranges are estimated at 18,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It inhabits wet meadows, marshland with

short vegetation, and river meadows at different altitudes. They nest on the ground in boggy areas, mud flats, marshes and wet meadows in lake and river valleys (Sumiya & Skryabin, 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow, sometimes on a slight eminence in wet areas. The female usually lays 4, rarely 2, 3 or 5 eggs of a non-glossy, creamy buff or stone, or tinted olive-brown colour with black dots, blotches and streaks. Both sexes incubate the eggs for 24-29 days. The female broods and cares for the chicks while the male guards them. If intruders approach the nest, the male attacks and calls loudly. Diet consists of adult and larval arthropods such as beetles, ants, crickets, grasshoppers, dragonflies, mayflies, cicadas and Lepidoptera, spiders, snails, earthworms, sometimes frogs, and also seeds and other plant parts. After the breeding season, young birds and adults form large flocks and feed in wetlands and grasslands. Insect-eating Northern Lapwing flocks in the Eastern Mongolian plain is a common sight during the autumn migration. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and mammals such as Red Fox (*Vulpes vulpes*) and Eurasian Badger (*Meles meles*)/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism / see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

141. Scientific Name: *Vanellus cinereus*

Species Authority: (Blyth, 1842)

Common Names: Grey-headed Lapwing (English), Saaral khavtgaalj, saaral zuunkhurga or saaral khavtgaalj (Mongolian)

Synonyms: *Microsarcops cinereus* (Blyth, 1842)

Taxonomical Notes: This species was included in genus *Microsarcops*. According to Sibley & Monroe (1990& 1993) and BirdLife International (2011), based on biological and ecological aspects and evolution of this species, the genus name of the species has been changed to *Vanellus*.

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Russian Federation, India, China, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan. It is considered vagrant in Indonesia, Malaysia, Singapore, Brunei Darussalam. It has uncertain presence and origin in Bhutan.

Regional Distribution: This species is found in wetlands in the valley of Nömrög River of Dornod province, and a single bird was observed in the valley of Khalkh River of Dornod province in June, 1994 (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2001). It migrates through these areas and Buir Lake, Khalkh and Nömrög River valleys of Dornod province. Andreas Buchheim, Pierre Yésou and Thorsten Zegula saw and photographed an individual at Bayan Lake of Bayannuur sum in Bulgan province on 9 June, 2010 (Buchheim *et al.*, 2010).

Population: The global population consists of 25,000 - 100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Most recent findings are from the east. However, there is a single record in Central Mongolia. The species migrates through the country by late April-early May (on spring migration) and late August-early September, depending food and weather conditions. Early and late migrants can occur before or later than these months in Mongolia. There is no evidence for its breeding in eastern Mongolia, but it might breed in the valleys of Khalkh and Nömrög River of Dornod province.

Habitat Type: Potential habitats are 5. Wetlands (5.1.-5.9., 5.10., 5.11, 5.13., 5.14.-5.17. on shores and banks on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism / see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5/.

Conservation Measures: Approximately 28.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Charadriidae

142. Scientific Name: *Vanellus gregarius*

Species Authority: (Pallas, 1771)

Common Names: Sociable Lapwing or Sociable Plover (English), Heeriin khavtgaalj (Mongolian)

Synonyms: *Chettusia/Charadrius gregarius* Pallas, 1771

Taxonomical Notes: This species belongs to *Chettusia* genus (Collar & Andrew, 1988; Cramp & Simmons, 1977-1994). According to AERC TAC (2003), Dowsett & Forbes-Watson (1993), Sibley & Monroe (1990 & 1993), and BirdLife International (2011), this taxon belongs to *Vanellus* genus due to similarity of biological and ecological features and evolution.

Global Status: Critically Endangered, A3bc

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Morocco, Ireland, Portugal, Spain, United Kingdom, France, Belgium, Netherlands, Germany, Switzerland, Italy, Denmark, Cameroon, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Hungary, Slovakia, Greece, Romania, Finland, Sudan, Egypt, Turkey, Russian Federation, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Mongolia.

Regional Distribution: Sh.Boldbaatar (MAS) and his Japanese colleagues found a single female together with 30 individuals of the Northern Lapwing in N & W Ögii Lake of Övörkhangaï province on 28 July, 1998. A male and two females were recorded in S & W Ögii Lake of Övörkhangaï province on 16 August, 1998. A single individual was seen at Nömrög River of Dornod province (Boldbaatar, 2002; Bold & Mainjargal, 2006). There are two other records, as follows: Ögii Lake of Övörkhangaï province (one adult in August, 1998) and Tsogiin Tsagaan Lake, Dornod province (one adult in June, 1995) (Goroshko, 1996; BirdLife International, 2001; Bold & Batsaikhan, 2006) and Khongoryn Els of Ömnögobi province, undated (N. Tsevenmyadag pers. comm.).

Population: The global population consists of 11,000 mature individuals. Global breeding and resident ranges are estimated at 2,020,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There are only a few records in different parts of the country. Major records are in Central Mongolia. The Ögii Lake is a potential important site for the species. The species migrates through the country by late April-early May (on spring migration) and late August-early September, depending food and weather conditions. Early and late migrants can occur before or later than these dates in Mongolia.

Habitat Type: Potential habitats are 5. Wetlands (5.1.-5.9., 5.10., 5.11, 5.13., 5.14.-5.17. on shores and banks on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and

legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought and snow cover on mountain tops/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: No particular conservation measures are taken. Migration route in Mongolia is unknown. However, the species migrates through protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

143. Scientific Name: *Pluvialis fulva*

Species Authority: (Gmelin, 1789)

Common Names: Pacific Golden Plover (English), Aziin suveetsagaan or Aziin suvee tsagaan (Mongolian)

Synonyms: *Charadrius dominicus* Muller, 1776

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

Global Distribution: Canada, United States, Mexico, Ecuador, Chile, Barbados, Bermuda, Greenland, Ireland, Spain, Algeria, Cote d'Ivoire, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Italy, Tunisia, Denmark, Gabon, the Democratic Republic of the Congo, Sweden, Namibia, Czech Republic, Malta, South Africa, Greece, Finland, Sudan, Zambia, Egypt, Turkey, Russian Federation, Burundi, Tanzania, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Seychelles, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, United States Minor Outlying Islands, Vanuatu, New Zealand, Nauru, Fiji, Tövalu, Wallis and Futuna, Tonga, Samoa, Tokelau, American Samoa, Niue, Cook Islands, Kiribati, French Polynesia.

Regional Distribution: Eastern Mongolia is one of the main stop-over sites for the species (Ostapenko *et al.*, 1978; Jeroen *et al.*, 2005). It migrates through lake and river valleys and dry steppe (Gombobaatar, 2012) in Northern Uvs and Great Lakes Depression, desert steppe depression in Zavkhan River, Khangai Mountain Range (except for mountains and forested areas), Southern Khangai Plateau, Hövsgöl areas (except for taiga and high altitude areas), Darkhad Depression, Orkhon-Selenge River basins, Hentii Mountain Range (except for forested areas), Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes; oases and small lakes

in the Northern and Eastern Gobi (Kozlova, 1930&1932; Bold, 1973; Ostapenko *et al.*, 1978; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Jeroen *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008).

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Population: The global population consists of 190,000 - 250,000 mature individuals. Global breeding and resident ranges are estimated at 1,730,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. In 2005, over two days the numbers of Pacific Golden Plover reached 2500 in Mongol Daguur Strictly Protected Area, lower Ulz River, and large lakes in the valley of Ulz River. Assuming no double counts, we observed 5.9- 7.5% (12,500 birds) of the global population of Pacific Golden Plover (166,000 -213,000 birds; Johnson 2003) in the second half of May 2005 (Jan *et al.*, 2005; Jeroen *et al.*, 2005).

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species passes through all over Mongolia by late April-early May (on spring migration) and mid-August-early September, depending on food availability and weather conditions. Late migrants were observed mid-May and mid-September. They feed on insects in dry open steppe. During the migration, they gather on lake shores, river banks, islands of lakes, and sand bars of lakes and rivers. From 15 May through 30 May 2005, 323 Pacific Golden Plovers were caught: 174 males (of which 12 were 2nd year birds) and 116 females (of which 8 were 2nd year birds). There were 4 adult birds for which we were unable to determine sex based on plumage characteristics. Our results strongly indicate that significant numbers of the Pacific Golden Plovers use Mongolia Daguur SPA to refuel, before they continue to their breeding grounds. The body mass of the Pacific Golden Plovers caught ranged from 100 to 139 g on the first catching day to between 152 g and 182 g on the last catching day. Over the whole catching period this corresponded to an average daily mass increase of 2.8 g. Males and females showed very similar patterns in mass change. A similar mass increase (3.1 g/day) was found in the dissected birds. Measurements showed that this mass increase is the result of both storage of fat and an increase of total fat-free dry-mass, with individuals reaching fat stores of up to 40 g. Individuals reaching fat reserves of around 40 g with additional protein stores should be able to make a big leap to, or at least close to, their breeding grounds. In times of a global decline in shorebird numbers (reference), it is very important to further assess and protect areas like these and to research the effects of human-induced manipulation and other factors like climate, especially in terms of rainfall, on the value of these sites to shorebirds (Jan *et al.*, 2005; Jeroen *et al.*, 2005).

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial - Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe destroy habitat/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening (Gombobaatar *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by

drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 6.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

144. Scientific Name: *Pluvialis squatarola*

Species Authority: (Linnaeus, 1758)

Common Names: Grey Plover or Black-billed Plover (English), Buural suveetsagaan or Buural suvee tsagaan (Mongolian)

Subspecies: *P.s.squatarola* (Howard & Moore (2003) for further details)

Synonyms: *Squatarola squatarola* Linnaeus, 1758, *Tringa squatorala* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Egypt, Zimbabwe, Turkey, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Réunion, Seychelles, Mauritius, Afghanistan, Pakistan, Tajikistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia,

Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, Palau, Papua New Guinea, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, New Zealand, Democratic People's Republic of Korea, Republic of Korea, Cook Islands.

Regional Distribution: The species migrates along sandy and rocky shores and riversides in valleys of Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers (Desert steppe depression in Zavkhan River); upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range) (except for mountains and forested areas); Southern Khangai Plateau; Terhiin Tsagaan and Telmen Lakes (Tarvagatai-Bulnai Mountains); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Onon, Balj, upper Herlen Rivers (Hentii Mountain Range) (except for forested areas); Ulz-Herlen River basins; Mongol Daguur Steppe and Middle Khalkh Steppe; Khalkh, Degee, Nömrög Rivers and Buir and Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan range); Böönstagaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes); oases and small lakes in Trans-Altai, Northern and Eastern Gobi (Kozlova, 1930&1932; Bold, 1973; Tungalag, 1983; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 360,000 mature individuals. World Global breeding and resident ranges are estimated at 3,980,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. It inhabits open lake shores, ponds, and pools with short vegetation and river banks and other type of wetlands in the Gobi Desert. The species passes through the areas by late April-early May (on spring migration) and flies to wintering grounds by late August-early September, depending on weather conditions and threats. Late migrants found by mid-May and mid-September. The number of migrants is always fewer than Pacific Golden Plover. This species migrates in a flock of Pacific Golden Plover and other migrants in the country.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands by mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets; abandoned gillnets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers in the eastern steppe, may destroy habitat/;
4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement / see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/;
6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming / drought of wetlands associated with habitat loss and degradation /, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/;
7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./;
8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/;
10. Human disturbance-10.1. Recreation and tourism / see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.2% of the species' range in Mongolia occurs within protected areas. Passes through some Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

145. Scientific Name: *Charadrius hiaticula*

Species Authority: Linnaeus, 1758

Common Names: Common Ringed Plover or Ringed Plover (English), Khuzuuvchit khiazat (Mongolian)

Subspecies in Mongolia: *C. h. tundrea* (see Prater *et al.* (1997) and Message & Taylor (2005) for further details)

Synonyms: *Aegialitis hiaticula tundrae* Lowe, 1915

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is limited. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Virgin Islands, U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, Thailand, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Democratic People's Republic of Korea, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Réunion, Seychelles, Mauritius, Afghanistan, Pakistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Mongolia, Bangladesh, Myanmar, Malaysia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, Palau, Guam, New Zealand.

Regional Distribution: This species has been observed several times on the shores of Buir Lake (Buir Lake-Khalkh River-Khyangan region range) on migration (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000). Single birds were found in Tes River (Zabelin, 1993) and Khar-Us Lake (Bayarkhuu, 2002).

Population: The global population consists of 360,000 - 1,300,000 mature individuals. Global breeding and resident ranges are estimated at 4,760,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in western and eastern Mongolia. However, majority of population migrates through western Mongolia. The species migrates along eastern and western Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. Bird lovers and beginners can confuse

with Little Ringed Plover at a distance. Gombobaatar (2009) and Gombobaatar *et al.* (2011a) are important guides to the identification of these species in the field.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/ 4.Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

146. Scientific Name: *Charadrius dubius*

Species Authority: Scopoli, 1786

Common Names: Little Ringed Plover (English), Nariin khiazat (Mongolian)

Subspecies in Mongolia: *C. d. curonicus* (see Howard & Moore (1994&2003); Prater *et al.* (1997); Message & Taylor (2005) for further details)

Synonyms: *Charadrius minor* Wolf et Meyer, 1805

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, the Democratic Republic of the Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and

Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands.

Regional Distribution: This species breeds at Khoton, Dayan, Tolbo, Achit and Uureg Lakes (Mongol-Altai Mountain Range) (except for high altitude areas); Khovd and Böhörön Rivers and small lakes; Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar Lakes and the delta of Khovd River valley (Great Lakes Depression); Desert steppe depression in Zavkhan; upper Orkhon River valleys, and Sangiin Dalai and Ögii Lakes (Khangai Mountain Range) (except for high elevated habitats); Tui and Baidrag Rivers and small lakes (Southern Khangai Plateau); Terhiin Tsagaan, Sangiin Dalai, Telmen, and Khar Lakes with wide shores and valleys (Tarvagatai-Bulnai Mountains); Darkhad Depression, Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Orkhon, Selenge, and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Terelj, Onon, and Balj Rivers (Hentii Mountain Range) (except for taiga forest and high altitude areas); Herlen and Ulz River basins; lakes in the Eastern Mongolian Plain; Khalkh, Degee, Nömrög Rivers and Buir, Tashgain Tavan and Ganga Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River valley (Baruunkhurai Depression). It migrates through the breeding areas and small lakes and oases in Trans-Altai, Northern and Eastern Gobi (Molleson, 1896; Buturlin, 1913; Kozlova, 1930; Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 280,000 - 530,000 mature individuals. Global breeding and resident ranges are estimated at 33,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from May-July. It nests on open lake shores and river banks with gravel, sandy soils and dried mud (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They nest on the ground, on bare ground or among grass. The nest is a hollow scrape with lining of plant materials or small stones. The female lays 3-4, rarely 5 eggs of a non-glossy, stone, sandy, brownish-buff colour with brown, purplish or black spots, and fine streaks. Both sexes incubate the eggs for 24-26 days. Soon after hatching the young leave the nest and actively run, following the parents and finding their own food. Both parents brood and defend the young. Broods live independently at c.21-24 days. They feed on insects, aquatic invertebrates such as snails, beetles, worms, and insect larvae on mud and beaches. On migration, the flocks mix with other waders or individuals occur on open shores and river banks and lakes and other types of wetlands. They leave their breeding site for wintering grounds by late August-early September, depending on breeding success, food, weather conditions and threat factors.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands

from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 2. Invasive alien species -2.1. Competitors /Muskrat (*Ondatra zibethicus*) in river valleys and lakes such as Khar-Us Lake, Orkhon, Selenge and Kharaa Rivers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas /; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

147. Scientific Name: *Charadrius alexandrinus*

Species Authority: Linnaeus, 1758

Common Names: Kentish Plover (English), Tengisiin khiazat (Mongolian)

Subspecies in Mongolia: *C. a. alexandrinus* (see Howard & Moore (1994&2003); Prater *et al.* (1997); Wild Bird Society of Japan (2000); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, Belize, Honduras, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya,

Austria, the Democratic Republic of the Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Moldova, Russian Federation, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Northern Mariana Islands.

Regional Distribution: This species breeds at Khoton, Tolbo, Dayan, Achit and Uureg Lakes (Mongol-Altai Mountain Range) (up to 2,600 m asl); Khovd and Böhörön Rivers and Lakes; Uvs Lake and the delta of Tes Nariin, Torkholog Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön Lakes and the delta of Khovd River (Great Lakes Depression); Desert steppe depression in Zavkhan; upper Orkhon River and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range) (except for high elevated habitats); Southern Khangai Plateau; Terhiin Tsagaan, Telmen, Khar Lakes with wide shores and valleys (Tavagatai-Bulnai Mountains); Darkhad Depression, Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Onon and Balj Rivers (Hentii Mountain Range) (except for taiga forest and high altitude areas); Herlen-Ulz River basins; rivers and lakes in Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög River and Buir, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes) and Bulgan River valley (Baruunkhurai Depression). It migrates through the breeding areas, lakes on the Eastern Mongolian Plain and oases in Trans-Altai, Northern and Eastern Gobi (Kozlova, 1930; Sushkin, 1938; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 300,000 - 460,000 mature individuals. Global breeding and resident ranges are estimated at 14,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. They nest on the ground on open river banks and lake shores with gravel and mud flats and on areas of dry mud with scanty vegetation near brackish water (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a hollow scrape, lined with sparse fragments of plants. The female lays mostly 3, rarely 2 or 4 eggs of a non-glossy, buff or sandy, but sometimes olive-tinted colour with dark, pale grey lines, spots and other markings. Both sexes incubate the eggs for 24 days. Partially buried eggs were found in the nest. After hatching, the young leave the nest and find their own food. Both parents brood and defend the young from predators and cattle. Broods live independently at c. 24 days. Both adults and young feed on arthropods and aquatic invertebrates. On migration, the flock mixes with other waders or individuals occurring on open river banks and lake shores and other types of wetlands. They leave the breeding site for wintering grounds by late August-early September, depending on breeding success, food, weather conditions and threat factors.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure

development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

148. Scientific Name: *Charadrius mongolus*

Species Authority: Pallas, 1776

Common Names: Mongolian Plover or Lesser Sand Plover (English), Mongol khiazat (Mongolian)

Subspecies in Mongolia: *C. m. schaeferi*, *C. m. mongolus* (see Howard & Moore (1994); Prater *et al.* (1997); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown, however it is known to occur in limited areas of Eastern Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Egypt, Eritrea, Canada, United States, Spain, France, Norway, Germany, Denmark, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Namibia, Poland, South Africa, Sudan, Zambia, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Mozambique, Kenya, Israel, Saudi Arabia, Syrian Arab Republic, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Vanuatu, New Zealand, Fiji.

Regional Distribution: This species is found in river banks, lake shores and wetlands in valleys of Herlen, Ulz, Döch Rivers and Yakhi, Bayan-Erhet, Höh, Döröö, Galuut, Bus, Khaichiin Tsagaan, Khorin

Tsagaan and Delger Tsagaan Lakes (Herlen-Ulz River basins); Khalkh, Nömrög, Azarga Rivers, and Buir, Shavar and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Mauersberger, 1975, 1980 & 1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Delgermaa *et al.*, 2004) and near Dalanzadgad town on migration in 2008 (N. Tseveenmyadag pers. comm.) Single birds were seen in Uvs Lake of Uvs province (Zabelin, 1993) and Khar-Us Lake of the Great Lakes Depression (Bayarkhuu, 2002).

Population: The global population consists of 310,000 - 390,000 mature individuals. Global breeding and resident ranges are estimated at 4,150,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. Individuals migrate through eastern Mongolia in small numbers by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. They feed and refuel on lake shores and river banks. They are also found in temporary wetlands in lake and river valleys, feeding on invertebrates. Flocks consisting of 2-30 individuals have been recorded in the east during migration. This species may be confused with Great Sand Plover in the field, depending on experience of observers. Gombobaatar (2009) and Gombobaatar *et al.* (2011a) field guides are important guides to distinguishing these species.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

149. Scientific Name: *Charadrius leschenaultii*

Species Authority: Lesson, 1826

Common Names: Greater Sand Plover (English), Zeven khiazat (Mongolian)

Subspecies in Mongolia: *C. l. leschenaultia* (see Howard & Moore, 2003; Message & Taylor (2005) for further details)

Synonyms: *Charadrius geoffroyi* Wagler, 1827

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence

in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Senegal, Morocco, Cote d'Ivoire, United Kingdom, France, Belgium, Nigeria, Netherlands, Norway, Germany, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Namibia, Poland, Malta, South Africa, Hungary, Greece, Finland, Sudan, Zambia, Ukraine, Bulgaria, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Mozambique, Cyprus, Malawi, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Vanuatu, New Zealand.

Regional Distribution: This species breeds at Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs, Khar-Us and Khar Lakes (Great Lakes Depression); Zavkhan River (Desert steppe depression in Zavkhan); Sharga River (south Shargyn Gobi); Southern Khangai Plateau; southern Middle Khalkh Steppe; Valley of the Lakes and Gobi (Dzungar, Trans-Altai, Northern and Eastern Gobi). It migrates through the breeding areas, lake shores and rivers, and oases in the Gobi Desert in valleys of Buyant and Khovd Rivers, and Tolbo and Dayan Lakes (Mongol-Altai Mountain Range), Khovd and Böhmörön Rivers (Great Lakes Depression), Khangai Mountain Range (including Tarvagatai-Bulnai Mountains), Orkhon, Selenge, Kharaa, and Yeröö River valleys (Orkhon-Selenge River basins); Herlen-Ulz River basins; lakes and river valleys in Middle Khalkh Steppe and Mongol Daguur Steppe and Eastern Mongolian Plain (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 180,000 - 360,000 mature individuals. Global breeding and resident ranges are estimated at 6,080,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It inhabits gravelly and stony desert steppe with sparse vegetation, sometimes almost non vegetation. Breeding pairs nest on the ground in open dry stony steppe with clay soil and short vegetation in desert steppe and the Gobi Desert in mountain regions (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow scrape in softer soil, sometimes sands, lined with sparse vegetation. The female lays 2-3 eggs of a non-glossy, pale buffish-yellow, greenish-tinted colour with blackish-brown and brown spots and markings. Both sexes incubate the eggs. After the chicks hatch, they follow the parents and move to bare areas. The parents brood and defend them from predators and humans. Sometimes, each parent separately brood each 1-2 chicks. Both adults and chicks feed on arthropods, insects and their larvae. In autumn, young birds and adults form flocks and stay near lake shores and river banks. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 4. Grassland (4.4.); 8. Desert (8.2., 8.3.); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing

and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ 4.1.2. Terrestrial, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism / see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 7.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

150. Scientific Name: *Charadrius veredus*

Species Authority: Gould, 1848

Common Names: Oriental Plover or Oriental Dotterel (English), Dornyn khiazat (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Russian Federation, Kazakhstan, Seychelles, India, China, Sri Lanka, Mongolia, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Viet Nam, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Republic of Korea, Japan, Palau, Papua New Guinea, Solomon Islands, Vanuatu, New Zealand.

Regional Distribution: This species breeds at Uvs Depression; Great Lakes Depression; Ulz and Herlen River basins; Mongol Daguur Steppe and Middle Khalkh Steppe; Eastern Mongolian Plain; Valley of the Lakes; Bulgan River valley; N&W Eastern Gobi. It is observed at Ögii Lake (Bold and Batsaikhan, 2006). It migrates through the breeding areas, lake shores and river banks in valleys of Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Khar-U, and Khar Lakes and the delta of Khovd River (Great Lakes Depression); Desert steppe depression in Zavkhan; southern Shargyn Gobi; Baruunkhurai Depression; upper Orkhon River and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); lakes in Southern Khangai Plateau; lower Orkhon, Selenge, Kharaa, Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Onon, and Balj Rivers (Hentii Mountain Range); small temporary steppe lakes in the

Eastern Mongolian Plain (Kozlova, 1930 & 1932; Bannikov & Skalon, 1948; Bold, A. 1969; Mauersberger 1980&1982; Smirenskii *et al.*, 1991; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Boldbaatar, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 70,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by early May. Breeding season continues from May-July. It inhabits dry open desert steppe with sparse vegetation, sandy soil with tall and sparse vegetation, and rarely homad desert almost without plants. On migration, they occur on lake shores, river banks and open areas of wetlands of steppe and Gobi Desert. They nest on the ground, in dry open stony steppe with short vegetation, sometimes sandy soils with sparse tall grass and Caragana bushes in mountain steppe, desert steppe and transition zones between desert steppe and Gobi Desert (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow scrape in softer soil, sometimes sands, lined with sparse vegetation. The female lays mostly 3 eggs, rarely 2 or 4, of a non-glossy, pale buffish-yellow, greenish-yellow colour with blackish-brown and brown spots and markings. The eggs may be partially buried by sands or sheep and goat droppings. Both sexes incubate the eggs. After the chicks hatch, they follow the parents, selecting barer areas. The parents brood and defend them from predators and humans. Both adults and chicks feed on arthropods, insects and their larvae. In autumn, young birds and adults form a flock and stay near lake shores and river banks. They leave their breeding site for wintering grounds by late August-early September, depending on breeding success, food, weather conditions and threats.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 4. Grassland (4.4.); 8. Desert (8.2., 8.3.); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 7.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Charadriidae

151. Scientific Name: *Eudromias morinellus*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Dotterel, Dotterel or Common Dotterel (English), Uriankhain tsagaankhiazat or Uriankhain suvee tsagaan (Mongolian)

Synonyms: *Charadrius morinellus* Linnaeus, 1758; *Charadrius tataricus* Pallas, 1773

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Bermuda, Iceland, Mauritania, Gambia, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, China, Mongolia, Japan.

Regional Distribution: This species breeds at Tavan Bogd, Siilhem, Mönh Khairkhan and Turgen Mountains (Mongol-Altai Mountain Range), and H \ddot{o} h Lake (Khangai Mountain Range) and Khoridol Saridag (H \ddot{o} vsg \ddot{o} l Mountain Range). It migrates through the breeding areas, lake shores and river banks in Mongol-Altai, Great Lakes Depression, Valley of the Lakes and Khalkh River basin (Kozlova, 1930&1932; Sushkin, 1938; Potapov, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Bold *et al.*, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Boldbaatar, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 50,000 - 220,000 mature individuals. Global breeding and resident ranges are estimated at 3,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. It inhabits rocky areas of high alpine tundra and bare hills of arctic and subarctic regions. The species arrives at breeding sites by early May, depending on weather conditions and snow at breeding and wintering grounds. Breeding season continues from May-July. They nest on the ground in hilly and rocky tundra, sometimes open tundra with low cover in high mountains (Kozlova, 1930; Sumiya & Skryabin, 1989). The nest is a shallow hollow on the ground, unlined or sparsely lined with dried plants. The female usually lays 3, but occasionally 2 or 4 eggs of a non-glossy, pale buff, yellowish, greenish or reddish-buff colour with pale grey and reddish-brown markings. The male incubates the eggs for 21-26 days. Hatchlings usually remain in the nest for only the first day. Both sexes, but mainly the male, broods and cares for the chicks. The female rarely helps the male. Chicks live independently at c. 4 weeks. Main diet is arthropods such as beetles, adult and larval Diptera, grasshoppers, crickets, earwigs and ants, spiders, snails and earthworms, as well as plant parts including leaves, seeds and flowers. On autumn migration, migrant groups consisting of 3-8

individuals are seen on lake shores and river banks with other waders. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.1.); 5. Wetlands (5.1.-5.9., 5.10., 5.11, 5.13., 5.14.-5.17. on shores and banks on migration); 8. Desert (8.2., 8.3. on migration); 12. Artificial – Aquatic (12.2., 12.9. rarely on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought and snow cover on mountaintops/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 19.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Rostratulidae

152. Scientific Name: *Rostratula benghalensis*

Species Authority: (Linnaeus, 1758)

Common Names: Greater Painted-snipe or Painted snipe (English), Öngöt kharaaljir or öngöt kharaalj (Mongolian)

Subspecies in Mongolia: *R. b. benghalensis*

(see Howard & Moore (1994&2003); Wild Bird Society of Japan (2000); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Mali, Liberia, Cote d'Ivoire, Burkina Faso, Ghana, Togo, Niger, Benin, Nigeria, Cameroon, Gabon, Equatorial Guinea,

the Democratic Republic of the Congo, Angola, Namibia, Chad, Central African Republic, South Africa, Botswana, Sudan, Zambia, Egypt, Zimbabwe, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Malawi, Ethiopia, Kenya, Israel, Jordan, Eritrea, Somalia, Madagascar, Oman, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Republic of Korea, Japan, New Zealand.

Regional Distribution: This species is classified as a vagrant. American paleontologists collected a single bird on the shores of Tsagaan Lake of Bayankhongor province (45 km northwest of Jinst sum) (Dawaa *et al.*, 1994; Bold & Mainjargal, 2006).

Population: The global population consists of 31,000 - 1,000,000 mature individuals. Global breeding and resident ranges are estimated at 23,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a vagrant in Mongolia. Since the single bird found in Mongolia, this species has not been recorded. However, this record is very isolated from its distribution. It possibly migrates through marshes, pools and other wetlands in the country late April-early May (on spring migration) and by late August-early September (on autumn migration) the same as other migrants.

Habitat Type: Potential habitats are the followings;

3. Shrub-land (3.4.); 5. Wetlands (5.1.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic, 1.3. Extraction -1.3.1. Mining, 1.4. Infrastructure development -1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport - water, 1.7. Fires; 4. Accidental mortality -4.1.2. Terrestrial-4.1.2.3. Poisoning; 5. Persecution -5.1. Pest control; 6. Pollution -6.1.1. Global warming, 6.2. Land pollution-6.2.2. Domestic, 6.3. Water pollution; 7. Natural disasters -7.1. Drought, 7.2. Storms, 7.3. Temperature extremes; 8. Changes in native species dynamics -8.2. Predators, 8.3. Prey or food base, 8.5. Pathogens or parasites; 9. Intrinsic factors -9.1. Limited dispersal, 9.5. Low densities; 10. Human disturbance -10.1. Recreation and tourism, 10.4. Transport-10.5. Fire.

Conservation Measures: They possibly migrate through wetlands in protected areas and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

153. Scientific Name: *Scolopax rusticola*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Woodcock or Woodcock (English), Buural khomnoot or khomnoot (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Greenland, Iceland, Cape Verde, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Japan, Democratic People's Republic of Korea, Republic of Korea. It is vagrant and possibly extinct in Bosnia and Herzegovina.

Regional Distribution: This species breeds at Hentii (Kozlova, 1930; Bold, 1977) and Hövsgöl (Bold, 1973; Sumiya, 1973; Skryabin & Sumiya, 1976; Sumiya & Skryabin, 1989) Mountain Ranges. The species occurs in breeding areas, including river valleys with bushes and young trees, open dry steppe with tall cover, mountain slopes with bushes and gardens in settlements in the Khangai and Hentii Mountain Ranges (including lower Orkhon, Selenge, Tuul, Terelj, Minj, Onon, Balj, Huder, Bulnai, upper Herlen River basins; lower Herlen and Ulz River valleys), Khalkh, Degee, Nömrög Rivers and Buir, Shavar, Tashgain Tavan, Khonkhor Lake valleys (Buir Lake-Khalkh River-Khyangan region), and rivers and wetlands in Gobi-Altai mountains, also the Bulgan River valley (Baruunkhurai Depression); temporal small lakes, ponds and oases in the Gobi (Trans-Altai, Northern and W Eastern Gobi) (Kozlova, 1930; Tugarinov, 1932; Bold, 1969; Bold, 1973; Sumiya, 1973; Mauersberger, 1980; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bayarkhuu, 1998; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Delgermaa *et al.*, 2004; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 10,000,000 - 26,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. They arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. It breeds in open moist woodlands with wet soils, shade and undergrowth in deciduous and mixed forests in mountain taiga forest, forest steppe and river valleys (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a hollow lined with dead leaves or other nearby dry plants. The female usually lays 4, occasionally 3-5 eggs of slightly glossy, pale buff to creamy, rarely pale warm buff to pinkish colour with dark brown or reddish-brown and paler purplish- grey blotches, spots and speckles. Parents incubate the eggs for 20-24 days. Young are tended by female only, leaving the nest as soon as down is dry. Young can fly a little at 10 days and live independently at c. 5-6 weeks. Both parents and chicks eat terrestrial and aquatic arthropods, including insects and their larvae, spiders, molluscs and crustaceans in breeding season and as well as on migration. Single birds are found in forest, forest steppe, mountain steppe, steppe, desert steppe, and Gobi Desert, occasionally planted trees. They leave their breeding site for wintering grounds by late August-early September, depending on food availability, weather conditions and threats.

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and

Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ -4.1.1.5. Poisoning /use of insecticides against Siberian Moth in forests/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Scolopacidae

154. Scientific Name: *Lymnocyptes minimus*

Species Authority: (Brünnich, 1764)

Common Names: Jack Snipe (English), Bichil salalj or høgchuuhei (Mongolian)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient because there is a lack of population data for Mongolia to make a regional assessment. It is likely to be Near Threatened as its distribution in Mongolia is less than 25,000 km² and its habitat is threatened by overgrazing and drought. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Senegal, Mauritania, Gambia, Guinea-Bissau, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Republic of Korea, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Viet Nam, Hong Kong, Taiwan, Philippines, Japan.

Regional Distribution: This species has been recorded on lake shores of Orog Lake (Valley of the Lakes) and Buir Lake on migration (Tugarinov, 1932; Piechocki *et al.*, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2008).

Population: The global population consists of 1,000,000 mature individuals. Global breeding and resident ranges are estimated at 7,680,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. The species arrives at breeding sites by late April-early May (on spring migration) and departs by late August-early September (on autumn migration). During the migration, single birds were observed while they were foraging and resting in waterlogged muddy areas, dense tussocks of vegetation, grassy marshes, the margins of rivers and streams, overgrown flood-lands, lakes shores and water meadows with sparse tall grasses. According to del Hoyo *et al.* (1996), its diet consists of adult and larval insects, annelid worms, small freshwater and terrestrial gastropods and the seeds and vegetative parts of aquatic plants.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 13.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

155. Scientific Name: *Gallinago solitaria*

Species Authority: Hodgson, 1831

Common Names: Solitary Snipe (English), Önchin kharaalj (Mongolian)

Subspecies in Mongolia: *G. s. solitaria*, *G. s. japonica* (see Howard & Moore (1994); Prater *et al.* (1997); Wild Bird Society of Japan (2000); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Russian Federation, Saudi Arabia, Islamic Republic of Iran, Kazakhstan, Turkmenistan, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan,

Myanmar, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Khangai, Hentii and Hövsgöl Mountain Ranges, possibly in Mongol-Altai Mountain Range. It migrates through the breeding territories, marshes, shores, banks, bogs, mud flats, swamps, pools, ponds and wet meadows in lake and river valleys in Mongol-Altai Mountain Range; Great Lakes Depression; Khangai (Bold, 1973), Mönhsaridag Mountain of Hövsgöl (Dorogostaiskii, 1913) and Hentii Mountain Ranges, including Orkhon-Selenge River basins (Molleson, 1896); Herlen-Ulz River basins and Buir Lake-Khalkh River-Khyangan region. Solitary individuals occur in Tes, Khovd, Buyant Rivers and Khar-Us, Khar Lakes (Great Lakes Depression) and Orkhon, Selenge and Yeröö Rivers in winter (Kozlova, 1930; Sushkin, 1938; Eregdendagva, 1960; Bold, 1973; Piechocki, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 11,000 - 110,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and wintering species. They arrive in breeding sites by late April-early May. Breeding season continues from May-July. They nest in boggy areas near springs and rivers and mountain slopes with dense sedges near wet meadows in alpine and subalpine zones (Bold, 1973). The female usually lays 4, rarely 3-5 eggs of yellow-creamy white colour with reddish-brown, brownish spots, blotches and other dark markings. Parents incubate the eggs and care for the broods. The broods are fed by parents for a short period then they find their own food. They are active at night. Both adults and young birds eat arthropods, insects and their larvae, beetles, molluscs, and other aquatic invertebrates. Most birds stay solitary on migration. They occur on shores of permanent and temporary lakes, marshes with sedges in river valleys, wide river banks, pools and ponds with tall marshy plants. During the migration, single birds are observed on muddy and stony lake shores in the steppe and large rivers. They leave their breeding site for wintering grounds by late August-early September, depending food and weather conditions. Wintering individuals are found in open and unfrozen rivers in the west. A single bird was seen in open water of Böhmörön River of Böhmörön sum of Uvs province (6 km NE of the sum center) on 10 February 2011 (S.Gombobaatar pers. comm.).

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ -4.1.1.5. Poisoning / use of insecticides against Siberian Moth in forests/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening hit electric wires/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /wintering birds get a stuck on ice when the open water freezes caused by temperature drops at night/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon migration/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

156. Scientific Name: *Gallinago stenura*

Species Authority: Bonaparte, 1830

Common Names: Pintail Snipe or Pin-tailed Snipe (English), Zambyn kharaalj (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Tunisia, Russian Federation, Kenya, Israel, Jordan, Somalia, Yemen, Comoros, Islamic Republic of Iran, Kazakhstan, Bahrain, Oman, Seychelles, Pakistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds in Hövsgöl and Khan Höhii Mountains and Zelter River (Orkhon-Selenge River basins). It may nest in the same habitats in the Hentii Mountain Range. It migrates through the breeding areas, shores, banks, mud flats, marshes and swamps in lake and river valleys in the Mongol-Altai and Gobi-Altai Mountain Range (except for alpine or very high altitude areas); Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges; Middle Khalkh Steppe; Buir Lake-Khalkh River-Khyangan region and Valley of the Lakes. It also occurs in Baruunkhurai Depression; small temporary lakes, ponds and oases in the Gobi (Trans-Altai, N&W Eastern Gobi) on migration (Tugarinov, 1916; Kozlova, 1930 & 1932; Tarasov, 1960; Bold, 1965; Bold, 1973; Ostapenko *et al.*, 1980; Mauersberger, 1980; Potapov, 1986; Rogacheva *et al.*, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 50,000 - 2,000,000 mature individuals. Global breeding and resident ranges are estimated at 8,780,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs nest in wet meadows, swamps, mountain tundra, flooded forest areas in mountain taiga forest, forest steppe and river valleys with deciduous and mixed forests (Sumiya & Skryabin, 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is on the ground, concealed by tall plants and lined with dried grasses. The female usually lays 4 eggs of slightly glossy, olive green or pale green colour with dark brown, blackish-brown or paler purplish-grey blotches, spots and speckles. Just after hatching, broods leave the nest. The chicks are fed by the female at first. Then they can find their own food. On migration, this species forms small to large flocks with 3-120 individuals and forages on shores of permanent and temporary lakes, river banks, pools and marshy areas. They leave the breeding site for wintering

grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of insecticides against Siberian Moth in forests/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening. Collided birds were occasionally found underneath 15 KV power lines in the steppe during autumn and spring (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control / see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

157. Scientific Name: *Gallinago megala*

Species Authority: Swinhoe, 1861

Common Names: Swinhoe's Snipe or Chinese Snipe (English), Shuguin kharaalj (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Russian Federation, Israel, Kazakhstan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Myanmar, Indonesia, Thailand, Malaysia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines,

Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Micronesia.

Regional Distribution: This species breeds at upper Onon, Sögnögör and Tuul Rivers (Hentii Mountain Range); Orkhon, Selenge and Zelter Rivers (Orkhon-Selenge River basins); Eg, Uur, Delgermörön Rivers, and Ulaan taiga (Hövsgöl Mountain Range). It migrates through the breeding areas, lake shores and river banks in Uvs, Khar-Us Lake and Khovd River (Great Lakes Depression); Orkhon, Selenge, Eg, Kharaa, Yeröö (Molleson, 1897) River valleys (Orkhon-Selenge River basins), upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai (Bold, 1973), Herlen River valleys (Hentii Mountain Range) (Kozlova, 1932; Bold, 1969), Khyangan (Bold, 1973), Herlen and Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe (Bianki, 1907; Kozlova, 1930; Mauersberger *et al.*, 1980; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bayarkhuu, 1998; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Delgermaa *et al.*, 2004; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 25,000 - 100,000 mature individuals. Global breeding and resident ranges are estimated at 3,450,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. They arrive in breeding areas by late April-early May. Breeding season continues from May-July. Breeding pairs nest in wet meadows and patchy thickets with young growth of birch near bogs and wet areas in lake and river valleys in mountain taiga forest, forest steppe and river valleys with large deciduous and mixed forests (Sumiya & Skryabin, 1989). The nest is on the ground, sealed by tall plants and lined with dried grasses and leaves. The female usually lays 4, sometime 3 or 5 eggs of yellow-cream white or yellowish pale green colour with dark brown or reddish-brownish spots, blotches and markings. The female incubates the eggs. After hatching chicks leave the nest. Parents care for the broods. They can find their own food soon after hatching. Both adults and chicks eat aquatic arthropods such as insects and their larvae, crustaceans, and worms like annelids. On migration, they form small flocks consisting of 2-3 individuals foraging and rest on lake shores, river banks, muddy areas of other type wetlands, and marshes with tall sedges and scattered bushes in Mongolia. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ -4.1.1.5. Poisoning /use of insecticides against Siberian Moth in forests/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon migration/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

158. Scientific Name: *Gallinago gallinago*

Species Authority: (Linnaeus, 1758)

Common Names: Common Snipe or Snipe (English), Shövgön kharaalj (Mongolian)

Subspecies in Mongolia: *G. g. gallinago* (see Howard & Moore (1994); Prater *et al.* (1997); Wild Bird Society of Japan (2000); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Ecuador, Columbia, Haiti, Bahamas, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Suriname, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands, United States Minor Outlying Islands.

Regional Distribution: This species breeds at Buyant, Khovd Rivers and Achit Lake (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Torkholig Rivers (Great Lakes Depression); Tamir, and upper Orkhon Rivers (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Orkhon, Selenge, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai Rivers (Hentii Mountain Range); upper Herlen River (Hentii Mountain) and NW Middle Khalkh Steppe; upper Ulz River; Khalkh, Degee, Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates through the lake shores, river banks and other wetlands at the breeding areas, Great Lakes Depression, Valley of the Lakes, Bulgan River valley (Baruunkhurai Depression or Dzungariin Gobi), small temporary lakes and oases in the Gobi (Trans-Altai, Northern and Eastern Gobi) (Pevtsov, 1883; Molleson, 1886; Tugarinov, 1916; Sushkin, 1914; Sushkin, 1925; Kozlova, 1930 & 1932; Tugarinov, 1932; Vaurie, 1964; Piechocki, 1968;

Bold, 1969; Bold & Eregdendagva, 1970; Bold, 1973; Piechocki *et al.*, 1981; Smirenskii & Sumiya, 1981; Stephan 1988; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 6,300,000 - 8,100,000 mature individuals. Global breeding and resident ranges are estimated at 32,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It nests in swamps and bogs with hummocks and grasses, flooded wet meadows with short, sometimes high and dense vegetation in mountain forest, forest steppe and river valleys with old deciduous and mixed forests (Sumiya & Skryabin, 1989; Sumiya, 2002; Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Gombobaatar, 2012). Breeding pairs nest on the ground, concealed in a clump of tall plants partly pulled over to hide the nest. The nest is a shallow hollow lined with grass. The female usually lays 4, sometimes 3 eggs of slightly glossy, pale to pale green or olive, or deeper olive-buff colour with dark brown or dark olive-brown or blackish-brown or reddish-brown blotches, spots and specks. Parent bird incubates the eggs for 18-20 days. Both sexes care for the chicks. Just after hatching, broods leave the nest. The parents feed young at first then soon they can find their own food. The chicks can fly c.19-20 days. They feed on aquatic arthropods such as insects and their larvae, annelids and worms. On migration, it forms small to large flocks consisting of 4-150 individuals and migrates through open shores of temporary and permanent lakes, marshes and pools with tall plants, shallow steppe lakes, edges of pools, ponds, springs, creeks, and rivers, wide lake and river valleys with tall sedge plants, and artificial wetlands. They leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./-4.1.1.5. Poisoning /use of insecticides against Siberian Moth in forests/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution-5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

159. Scientific Name: *Limnodromus scolopaceus*

Species Authority: (Say, 1823)

Common Names: Long-billed Dowitcher (English), Kharaaljin tsuutsil or kharaaljin tsuutsali (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Haiti, Argentina, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Saint Kitts and Nevis, Barbados, Bermuda, Iceland, Morocco, Ireland, Portugal, Spain, United Kingdom, France, Netherlands, Norway, Germany, Italy, Denmark, Sweden, Czech Republic, Poland, Hungary, Greece, Finland, Russian Federation, Israel, Oman, India, Indonesia, Thailand, Malaysia, Viet Nam, Brunei Darussalam, Hong Kong, Japan, Papua New Guinea, Western Sahara.

Regional Distribution: A single bird was observed near Degee River of Dornod province (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000).

Population: The global population consists of 400,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There is only one record for Mongolia. It possibly migrates through eastern Mongolia with other waders on spring (late April-early May) and autumn migrations (late August-early September). They occur on muddy shores of saline and freshwater lakes, river banks and open flood lands in Mongolia on migration. They feed on insects, annelid worms, and molluscs.

Habitat Type: Potential habitats are 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water and human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-

over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, they may migrate through protected areas and Important Bird Areas of Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

160. Scientific Name: *Limnodromus semipalmatus*

Species Authority: (Blyth, 1848)

Common Names: Asian Dowitcher or Asiatic Dowitcher (English), Aziin tsuutsil or Aziin tsuutsali (Mongolian)

Global Status: Near Threatened

Regional Status: Vulnerable, C2a(i)

Rationale for Assessment: This species has been assessed as Vulnerable, C2a(i), because the number of mature individuals in the largest subpopulation is less than 1,000 and the population is undergoing a continuing decline. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Vulnerable, C2a(i)

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Russian Federation, Kenya, Yemen, Kazakhstan, United Arab Emirates, Uzbekistan, India, China, Sri Lanka, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea, New Zealand.

Regional Distribution: This species breeds at Airag Lake (Great Lakes Depression), Zavkhan River (Zavkhan Desert Steppe Depression), Ulz River (Teel Lake) (Mongol Daguur Steppe) and a pair was seen at the delta of Khoroo River, Hövsgöl Lake in second decade of June (Sumiya & Skryabin, 1989). S.Gombobaatar found and photographed three breeding pairs with 2 eggs in wetlands of Borogchin Lake of Bayannuur sum of Bulgan province (Eastern Khangai) on 16 June, 2007, and 4 breeding pairs with two eggs each in the wetlands of app. 10° SE of Lun sum, Töv province on 17 June, 2007 (Gombobaatar, 2010; S. Gombobaatar pers. comm.). It migrates across the breeding areas, river banks, lake shores and wetlands in regions and valleys of Airag Lake (Pevtsov, 1883); Hövsgöl Lake and Eg River, Hövsgöl Mountain Range (Sumiya & Skryabin, 1989); N&NE Khangai Mountain Range and Valley of the Lakes (on migration) (Bold, 1973), Orog Lake (Kozlova, 1930&1932); Orkhon-Selenge River basins; Hentii Mountain Range (Pevtsov, 1883); Buir Lake-Khalkh River -Khyangan region (Bold & Eregdendagva, 1970; Ostapenko *et al.*, 1977); Middle Khalkh Steppe; Mongol Daguur Steppe (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya & Skryabin, 1989, Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008). Three colonies of the species, totaling at least 57 adults were found at Airag Lake of Uvs province on 18 June 2006. One bird had an Australian leg-flag (Bräunlich, 2006a).

Population: The global population consists of 23,000 mature individuals. Global breeding and resident ranges are estimated at 2,750,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a breeding visitor to Mongolia. They arrive in breeding sites by late April-

early May. Breeding season continues from May-July. Breeding pairs nest in marshy grasslands and inaccessible bogs with hummocks and high vegetation in lake valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow on tussocks or muddy bare parts of marshes without lining grasses and situated on the ground. The female lays 2, very rarely 3 eggs of olive green or pale green colour with dark brown or dark grey blotches and markings. They breed in small colonies of 4-10 pairs in Mongolia. Neighbouring nests are spaced 6-250 m apart. After hatching young leave nest and follow the parents. According to del Hoyo *et al.* (1996), on the breeding grounds, its diet consists of small fish, insect larvae and oligochaetes and polychaetes, insect larvae and molluscs on migration. It is a gregarious species that occurs in small flocks consisting of 3-60 individuals on muddy shores, muddy river deltas, flooded meadows and grassy bogs in Mongolia. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1.1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Livestock graze and destroy marshes and bogs near freshwater lakes and pools where this species breed. The overgrazing of livestock in marshes and bogs near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water / ecotourism development, human settlement, tourist camps and water transport near breeding sites, are major threats to the species/-1.4.6. Dams /two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, marsh grasses and wetlands at the lakes and channel had also dried out and died. This change threatens breeding and non-breeding birds through loss of habitat and food resources/.

1.7. Fires: Steppe fires may burn breeding habitats near lakes and rivers.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned gill nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.1.

4.2. Collision -4.2.1. Pylon and building collision: Collision is one of the potential threats to the species.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with sedges and reed beds, marshes, bogs, and wet meadows in Mongolia are important habitats for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting, roosting and refueling habitats.

8. Changes in native species dynamics-8.2. Predators: Carnivores such as Raccoon Dog (*Nyctereutes procyonoides*), Grey Wolf (*Canis lupus*), and Eurasian Badger (*Meles meles*) in the region prey upon the flightless and slow-moving chicks at night. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

9. Intrinsic factors-9.2. Poor reproduction-9.5. Low densities-9.9. Restricted range: The intrinsic factors possibly leads the population decrease and low breeding success in Mongolia.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have negatively affected individuals as they migrate and feed.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Hunting this species has been prohibited since 1995. Included in both the Russian and International Red Books. It was covered by the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 9.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

161. Scientific Name: *Limosa limosa*

Species Authority: (Linnaeus, 1758)

Common Names: Black-tailed Godwit (English), Morin tsuutsal or morin tsuutsali (Mongolian)

Subspecies in Mongolia: *L. l. limosa*, *L. l. melanuroides* (see Howard & Moore (1994); Prater *et al.* (1997); Message & Taylor (2005) for further details)

Global Status: Near Threatened

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Egypt, Eritrea, Estonia, Ethiopia, Canada, Indonesia, United States, Puerto Rico, Virgin Islands U.S., Saint Kitts and Nevis, Trinidad and Tobago, 8Saint Pierre and Miquelon, Greenland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Belarus, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Malawi, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Micronesia, Solomon Islands, New Caledonia, New Zealand.

Regional Distribution: This species breeds at Achit, Uureg Lakes (Mongol-Altai Mountain Range), Uvs Lake and the delta of Tes Nariin, Torkholig Rivers (Northern Uvs Depression), Hövsgöl areas (Hövsgöl Mountain Range) (Sumiya & Skryabin, 1989), and Ulz and Onon River valleys. It migrates through the breeding areas and shores, banks, marshes, pools and wet grasslands in lake and river valleys in the Mongol-Altai (except for alpine, subalpine zones); Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine, dense forests); Orkhon-Selenge River basins; Middle Khalkh Steppe; Mongol Daguur Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region (Tugarinov, 1916; Kozlova, 1932; Bold, 1973), Bööntsagaan, Orog (Tugarinov, 1916; Kozlova, 1932; Bold, 1973), Taatsyn Tsagaan Lakes (Valley of the Lakes). It has been recorded in oases and temporary lakes in the Gobi (Trans-Altai, Northern and western Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 630,000 - 805,000 mature individuals. Global breeding and resident ranges are estimated at 7,180,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding birds arrive in breeding sites by late April-early May. Breeding season continues from May-July. They nest in open wet meadows, swamps, marshy-grassland and boggy areas in forest steppe and mountain steppe zones along lake valleys (Sumiya & Skryabin, 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow, lined with grasses. The female usually lays 4, occasionally 3-5 eggs of slightly glossy, light green or olive or olive or buff with olive- brown or dark brown and paler grey or purplish-grey small blotches, spots and specks. They incubate the eggs for 22-24 days. Young leave nest when their down is dry. Both sexes care for the young. The broods can fly at c.4 weeks. This is a highly gregarious species. After the young fledge, breeding birds begin to congregate in loose flocks of up to 50-200 individuals. On autumn migration, 50-300 birds occur in freshwater habitats, including swampy lake shores, pools, flooded grassland and sandy beaches of temporary and permanent lakes. Both adults and young eat adult and larval insects (especially beetles, grasshoppers), annelid and polychaete worms, molluscs, crustaceans, spiders, and other terrestrial and aquatic invertebrates. They leave their breeding site for wintering grounds by late August-early September, depending on breeding success, food, weather conditions and threats.

Habitat Type: 4. Grassland (4.4.); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Population threats are not well studied in Mongolia. However, Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Livestock graze and destroy marshes and bogs near freshwater lakes and pools where this species breed. The overgrazing of livestock in marshes and bogs near lakes and rivers is a cause of habitat degradation associated with drought of the wetlands and marshes.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species at rivers and lakes which are contaminated by heavy metals like mercury.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.3. Tourism and recreation: Ecotourism development, human settlement, tourist camps and water transport near breeding sites, are major threats to the species.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Reed beds, marsh grasses and wetlands at the lakes and channel have dried up. This change threatens breeding and non-breeding birds through loss of habitat and food resources.

1.7. Fires: Steppe fires may burn breeding habitats near lakes and rivers.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Hövsgöl, Ögii and Khar Lakes. Abandoned gill nets along the lake shores are a hazard both to local livestock and this species.

4.1.2.3. Poisoning, 4.2. Collision -4.2.1. Pylon and building collision: Insecticide against Siberian Moth and Bromadilone against Brandt's Vole (*Lasiopodomys brandti*) and collision are potential threats to the species.

5. Persecution-5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Ponds, pools and small freshwater lakes with sedges and reed beds, marshes, bogs, and wet meadows in Mongolia are important habitats for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting, roosting and refueling habitats.

8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Raccoon Dog (*Nyctereutes procynoides*), Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region easily prey upon them at night. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and busy roads have negatively affected individuals as they migrate and feed.

10.5. Fire: See 1.7.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

162. Scientific Name: *Limosa lapponica*

Species Authority: (Linnaeus, 1758)

Common Names: Bar-tailed Godwit (English), Khurgan tsuutsal or khurgan tsuutsali (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Brazil, Venezuela, Puerto Rico, Virgin Islands U.S., Saint Pierre and Miquelon, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Burundi, Tanzania, Cyprus, Malawi, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, India, Kyrgyzstan, French Southern Territories, British Indian Ocean Territory, Maldives, China, Sri Lanka, Mongolia, Bangladesh, Christmas Island, Indonesia, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, Vanuatu, New Zealand, Nauru, Fiji, Tonga, Samoa, American Samoa, Niue, Kiribati.

Regional Distribution: This species has been recorded on shores, banks, marshes, pools and wet

grasslands in lake and river valleys in Northern Uvs and Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges, Orkhon-Selenge River basins, Herlen and Uz river valleys and Buir Lake-Khalkh River-Khyangan region migration (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 1,100,000 - 1,200,000 mature individuals. Global breeding and resident ranges are estimated at 1,470,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a passage migrant. The species migrates through the country by late April-early May (on spring migration) and late August to early September (on autumn migration). During the migration, small groups, consisting of 1-3 individuals mixed with Black-tailed Godwits occur on open muddy and stony shores of saline and freshwater lakes, river banks and sandy beaches, short-grass meadows, and open flood lands. Del Hoyo *et al.* (1996) mentioned that this species feeds on insects, annelid worms, molluscs and occasionally seeds and berries.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/;
4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/;
5. Persecution- 5.1. Pest control /see 4.1.1.5. /;
6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/;
7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./;
8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/;
10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 11.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

163. Scientific Name: *Numenius minutus*

Species Authority: Gould, 1841

Common Names: Little Curlew (English), Bichilhen tutgaljin (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, United Kingdom, Norway, Germany, Finland, Russian Federation, Kazakhstan, Seychelles, China, Mongolia, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, Palau, Papua New Guinea, Guam, New Zealand, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: The species migrates along the lakes in the Great Lakes Depression, Zavkhan River valley (Zavkhan Desert Steppe Depression) N Khangai Mountain Range, Orkon-Selenge basins, Uvs Lake depression and large lakes in Valley of the Lakes. The most intensive migration passes through Tuul, Onon, Balj, Ulz and Herlen River valleys (E Hentii Mountain Range, Mongol Daguur Steppe and E Middle Khalkh Steppe); small lakes and river valleys in western Middle Khalkh Steppe, Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Fomin & Bold, 1991; Zabelin, 1993; Dawaa *et al.*, 1994; Bayarkhuu, 1998 and 2002; Zabelin, 1998; Tseveenmyadag *et al.*, 2000; Delgermaa *et al.*, 2004; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 180,000 mature individuals. Global breeding and resident ranges are estimated at 969,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species migrates by late April-early May (on spring migration) and mid-August-early September (on autumn migration), depending on food availability and weather conditions. During the autumn migration, flocks consisting of 4-300 individuals forage in dry steppe and feed on terrestrial insects and larvae like grasshoppers. High concentration of the species on migration was observed in eastern Mongolian plain along Ulz, Herlen, Onon, and Balj River valleys. The flocks are also found on lake shores and banks of large rivers in the east while they are feeding on aquatic invertebrates.

Habitat Type: 4. Grassland (4.4.); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ -4.1.1.5. Poisoning / use of insecticides against Siberian Moth in forests/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 5.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

164. Scientific Name: *Numenius phaeopus*

Species Authority: (Linnaeus, 1758)

Common Names: Whimbrel (English), Besreg tutgaljin (Mongolian)

Subspecies in Mongolia: *N. p. phaeopus*, *N. p. variegates* (see Howard & Moore (1994); Prater *et al.* (1997); Wild Bird Society of Japan (2000); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Suriname, Saint Pierre and Miquelon, French Guiana, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Bhutan, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, French Southern Territories, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Myanmar, Cocos (Keeling) Islands, Indonesia, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Vanuatu, New Zealand, Fiji, Tövalu, Samoa, American Samoa, Kiribati.

Regional Distribution: This species migrates along river banks, lake shores and occasionally across dry steppe in valleys of Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, and Airag Lakes (Great Lakes Depression); N Khangai Mountain Range; Delgermörön and Eg Rivers, and Hövsgöl Lake (Hövsgöl Mountain Range); Shishgid and Dood Lake wetlands (Darkhad Depression); the lakes of the Valley of the Lakes; lower Orkhon-Selenge Rivers (Orkhon-Selenge River basins); Ulz and lower Herlen River; Khalkh, and Nömrög Rivers, and Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*,

1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 1,000,000 - 2,300,000 mature individuals. Global breeding and resident ranges are estimated at 4,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. They pass through Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). One to three birds joined with flocks of Eurasian Curlew, Little Curlew, Black-tailed Godwit rest and feed on muddy and stony shores of saline and freshwater lakes, wide banks of large rivers, flooded areas, water edge of large pools and marshes, river valley and dry steppe in the country. They are also found in oases, springs, small lakes and ponds in the Trans-Altai, Alashani, Northern and Eastern Gobi. They feed on terrestrial and aquatic invertebrates (grasshoppers, and other insects and their larvae in dry steppe), crustaceans, molluscs, annelids, and small fish in shallow lakes and pools.

Habitat Type: 4. Grassland (4.4.); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming / associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

165. Scientific Name: *Numenius arquata*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Curlew, Curlew or Western Curlew (English), Morin tutgaljin (Mongolian)

Subspecies in Mongolia: *N. a. orientalis* (see Howard & Moore (1994); Prater *et al.* (1997); Wild Bird Society of Japan (2000); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Bahamas, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Czech Republic, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, United Republic of Tanzania, Uganda, Mozambique, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands, Niue.

Regional Distribution: This species breeds at Tui River (Southern Khangai Plateau), Hövsgöl and Darkhad Depression (Hövsgöl Mountain Range); Tuul, Tunhel, Kharaa Rivers (Hentii Mountain Range). It migrates across lakes, open river valleys, lake shores, river banks and dry open steppe in Mongol-Altai (less than 2,200m asl); Great Lakes Depression; Valley of the Lakes; Khangai (Kozlova, 1932), Hövsgöl and Hentii (Vaurie, 1964; Piechocki, 1968; Bold, 1968) Mountain Ranges (except for dense taiga, mountains above 2,200m asl, forest rivers); Middle Khalkh Steppe, Mongol Daguur Steppe and Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Tugarinov, 1916; Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 770,000 - 1,065,000 mature individuals. Global breeding and resident ranges are estimated at 12,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. They arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. They nest in open mossy and grassy lowlands, flooded areas and open wet meadows in mountain forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow, lined with grasses placed on the ground among tall plants. The female usually lays 4, occasionally 3 or 5 eggs of fairly glossy, light green, olive-green, or dull olive colour with dark olive, olive-brown, or dark purplish or reddish-brown spots, specks, and blotches. Parents incubate the eggs for 26-30 days. Young leave the nest as soon as their down is dry. Both sexes care for the broods and feed them at first. Later they can find their own food. The chicks can fly in c. 5-6 weeks. According to del Hoyo *et al.* (1996), both parents and young eat invertebrates including adults and larvae of terrestrial and aquatic insects, molluscs, crustaceans and small fish. On migration, it forms flocks consisting of 3-30 individuals, foraging in open dry steppe and lake and river valleys. They are also found on lake shores and river banks, marshy wetlands, pools and ponds with sedges and marsh plants in Mongolia. They leave their breeding site for wintering grounds by late August-early September, depending on breeding success, food, weather conditions and threat factors.

Habitat Type: 4. Grassland (4.4.); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for souvenirs and stuffed specimens for display in public areas/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming / associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

166. Scientific Name: *Numenius madagascariensis*

Species Authority: (Linnaeus, 1766)

Common Names: Far Eastern Curlew or Eastern Curlew (English), Madagaskar tutgaljin (Mongolian)

Global Status: Vulnerable

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Russian Federation, China, Mongolia, Indonesia, Thailand, Malaysia, Viet Nam, Bangladesh, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea, New Zealand.

Regional Distribution: This species migrates across lake shores, river banks and dry steppe in the valleys of Ögii Lake (Khangai Mountain Range), Tuul, Orkhon, Selenge, Onon, Balj Rivers (Hentii Mountain Range), Herlen and Ulz River basins (Middle Khalkh Steppe and Mongol Daguur Steppe); Khalkh, Nömrög Rivers and Buir, Shavar, Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes) (Fomin & Bold, 1991; Dawaa *et*

al., 1994; Ostapenko *et al.*, 1980; Tseveenmyadag *et al.*, 2000; Delgermaa *et al.*, 2004; Tseveenmyadag & Bold, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 38,000 mature individuals. Global breeding and resident ranges are estimated at 727,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species passes through Mongolia (major population through Eastern Mongolia) by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. One to five birds together with Eurasian and Little Curlew flocks rest and roost on lake shores, river banks, water edge of large pools and marshes and feed in river valley and dry steppe in Mongolia. Its diet consists of terrestrial and aquatic invertebrates such as insects and their larvae particularly grasshoppers in dry steppe, crustaceans, molluscs, worms, and occasionally small fish.

Habitat Type: 4. Grassland (4.4.); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Detailed surveys have not been focused on population threats to the species for Mongolia. However, there are several potential threats to the species as follows:

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/;
4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ 4.1.2. Terrestrial, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/;
6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/;
7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./;
8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/;
10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

167. Scientific Name: *Tringa erythropus*

Species Authority: (Pallas, 1764)

Common Names: Spotted Redshank or Spotted Sandpiper (English), Khar högchuu (Mongolian)

Synonyms: *Scolopax fusca* (Linnaeus, 1766)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Virgin Islands, U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan, Guam, Micronesia.

Regional Distribution: The species migrates along rivers, lakes, ponds, oases and other types of wetland in the Mongol-Altai Mountain Range and Gobi-Altai Mountain Range, Great Lakes Depression; Zavkhan Desert Steppe Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for high altitude areas, taiga forest); Middle Khalkh Steppe; Mongol Daguur Steppe and Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes; Baruunkhurai Depression; small lakes and oases in Alashani, Trans-Altai Gobi and Northern Gobi and S&W Eastern Gobi (Sushkin, 1925; Kozlova, 1930&1932; Tugarinov, 1932; Sushkin, 1938; Tarasov, 1960; Grummit, 1961; Bold & Eregdendagva, 1970; Fischer, 1970; Bold, 1973; Kleinstäuber&Succow, 1978; Ostapenko 1980; Piechocki *et al.*, 1981; Mauersberger 1980&1982; Polyakov, 1912 *et al.*, 1982; Stepanyan&Bold, 1983; Potapov, 1986; Fomin&Bold, 1988; Rogacheva *et al.*, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Smirenskii & Sumiya, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Tsegmid & Uuganbayar, 2006; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 110,000 - 350,000 mature individuals. Global breeding and resident ranges are estimated at 3,720,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species migrates along lake shores, river banks, salt-marshes, shallow and muddy bare shores, marshes and marshy lake edges, small reservoirs, pools and flooded grasslands all over Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration), depending food and weather conditions. It forms small and large flocks consisting of 10 to 300 individuals in Mongolia. Its diet consists chiefly of aquatic insects and their larvae (especially swimming beetles and hemipterans), terrestrial flying insects (such as crane-flies), small crustaceans, molluscs, polychaete worms, and small fish and amphibians up to 6-7 cm long (BirdLife International, 2011).

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands

from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

168. Scientific Name: *Tringa totanus*

Species Authority: (Linnaeus, 1758)

Common Names: Common Redshank or Redshank (English), Ulaanhölt högchuu or ulaan hölt högchuu (Mongolian)

Subspecies in Mongolia: *T. t. totanus*, *T. t. ussuriensis* (see Howard & Moore (1994&2003) and Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, Saint Pierre and Miquelon, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam,

Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of, Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Micronesia, It is regionally extinct in Bosnia and Herzegovina.

Regional Distribution: This species nests in bogs, mud flats, marshes and wet meadows with hummocks, in river banks and lake shores (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) at Khoton, Khorgon, Achit, Uureg Lakes and Khovd River (Mongol-Altai Mountain Range); Khovd and Böhmörön Rivers; small lakes and rivers in Kharkhiraa and Turgen Mountains; Uvs, Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes and Tes, Khovd Rivers in Great Lakes Depression; rivers and lakes in Zavkhan Desert Steppe Depression; Tamir, Khanui and upper Orkhon River (Khangai Mountain Range); Southern Khangai Plateau; Hövsgöl Mountain Range, including Darkhad Depression; Orkhon-Selenge River basins; Tuul, Onon, Balj Rivers (Hentii Mountain Range); Ulz, Herlen and other rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; Buir Lake-Khalkh River-Khyangan region; Bööntsagaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, lake shores and river banks in the Gobi-Altai Mountain Range, oases in the Trans-Altai Gobi, Northern Gobi and S & W Eastern Gobi (Molleson, 1896; Buturlin, 1913; Tugarinov, 1916; Kozlova, 1930&1932; Tugarinov, 1932; Sushkin, 1938; Tarasov, 1960; Grummit, 1961; Fischer, 1970; Bold, 1969&1973; Bold, 1977; Kleinstäuber & Succow, 1978; Ostapenko 1980; Piechocki *et al.*, 1981; Mauersberger 1980 & 1982; Polyakov, 1912 *et al.*, 1982; Stepanyan & Bold, 1983; Potapov, 1986; Fomin & Bold, 1988; Rogacheva *et al.*, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Smirenskii & Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 960,000 - 2,600,000 mature individuals. Global breeding and resident ranges are estimated at 15,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It inhabits wet grasslands, grassy marshes and swamps, and wet meadows with tussocks and marsh grasses. Nest is on the ground, a hollow lined with nearby plants, and usually well hidden in grass-tufts. The female lays 4, sometimes 3, rarely 5 eggs of slightly glossy, pale buff or creamy- buff colour with blackish-brown, dark reddish-brown blotches, usually small spots, specks and rarely short fine lines and some purplish-grey markings. Incubation is for 23-24 days. Hatchlings leave the nest soon after hatching. Both parents brood and help feed them just after hatching. Both young and adults eat arthropods, annelid worms and their larvae. On migration, they form small to large flocks consisting of 5-100 individuals, feeding on rocky and muddy shores of large shallow lakes and resting on the river banks. On migration, the species occurs on lake shores and river banks, edges of wetlands such as pools, ponds, saline lakes, and oases. They leave the breeding sites for wintering grounds by late August-early September.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3.

Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

169. Scientific Name: *Tringa stagnatilis*

Species Authority: (Bechstein, 1803)

Common Names: Marsh Sandpiper (English), Burdnii hөгchuu (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Egypt, Equatorial Guinea, Eritrea, Estonia, Ethiopia, United States, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Belarus, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Northern Mariana Islands, Micronesia, New Zealand.

Regional Distribution: This species breeds in Ulz River valley, pools with reed beds and marshes SW of Tsegeen Lake, Lun sum of Töv province, Borogchin Lake of Bayannuur of Bulgan province, Ögii, Terhiin Tsagaan, Telmen, Oigon, Erhil Lakes and Tes River valley (Uvs Depression). It migrates through the breeding range, rivers, lakes, ponds, oases and other wetlands in Great Lakes Depression, Zavkhan

Desert Steppe Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for high altitude areas and taiga forest), Middle Khalkh Steppe, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes and Baruunkhurai Depression (Kozlova, 1930; Kleinstäuber&Succow, 1978; Tungalag, 1983; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 260,000 - 1,200,000 mature individuals. Global breeding and resident ranges are estimated at 6,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs prefer wetlands from open steppe to forest steppe, including shallow freshwater and brackish marshlands, grassy and marshy lake-edges, river valleys, and flooded meadows (Sumiya&Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Nest is a shallow hollow, lined with dry grass on the ground, in grass. The female usually lays 4, rarely 5 eggs of slightly glossy, cream to pale creamy- buff, occasionally deeper buff colour with dark reddish-brown, blackish-brown and paler purplish-grey spots, blotches and specks. Both sexes incubate the eggs. Both adults care for young. The young leave the nest soon after hatching. Both adults and young birds feed on aquatic and terrestrial insects and their larvae, crustaceans, and molluscs. On migration, single individuals and small flocks occur on the margins of inland freshwater and brackish wetlands (swamps, salt-marshes, marshy lake-edges, muddy areas of wetlands, and river banks). They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Scolopacidae

170. Scientific Name: *Tringa nebularia*

Species Authority: (Gunnerus, 1767)

Common Names: Common Greenshank or Greenshank (English), Uher hөгchuu (Mongolian)

Synonyms: *Scolapax canescens* Gmelin, 1789

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Puerto Rico, Trinidad and Tobago, Barbados, Bermuda, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, French Southern Territories, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, New Zealand.

Regional Distribution: This species migrates along river banks, lake shores and other wetlands in the Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, including Northern Uvs Depression, Zavkhan Desert Steppe Depression, Southern Shargyn Gobi, Khangai Mountain Range, Southern Khangai Plateau, Hövsgöl Mountain Range, including Darkhad Depression; Orkhon-Selenge River basins, Hentii Mountain Range, lower Herlen River valley, Ulz River basin (Mongol Daguur Steppe), Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression; small lakes and oases in the Trans-Altai, Northern and W&E Eastern Gobi (Sushkin, 1925; Tugarinov, 1929; Kozlova, 1930; Sushkin, 1938; Vaurie, 1964; Bold, 1969; Bold, 1977; Kleinstäuber & Succow, 1978; Ostapenko *et al.*, 1980; Piechocki *et al.*, 1981; Mauersberger 1980&1982; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 440,000 - 1,500,000 mature individuals. Global breeding and resident ranges are estimated at 12,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species passes through Mongolia by late April-early May (on spring migration) and by late August-early September, depending on food availability and weather conditions. They inhabit open lake shores and river banks, swamps, ponds, flooded grasslands, flooded meadows, dried-up lakes, sandbars and marshes. It feeds on insects and their larvae, especially beetles, crustaceans and molluscs. They migrate in small flocks consisting of 3-15 individuals together with other waders.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

171. Scientific Name: *Tringa ochropus*

Species Authority: Linnaeus, 1758

Common Names: Green Sandpiper (English), Suultsagaan hógchuu or Suul tsagaan hógchuu (Mongolian)

Synonyms: *Helodromas ochropus* Zarudny & Smirnov, 1918

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Mexico, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Khovd River and Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Ider and Chuluut Rivers (Tarvagatai-Bulnai Mountain Range); near Uliastai town; Shishhid and Dood Lake wetlands, Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Orkhon, Selenge, Kharaa, Yeröö Rivers (Orkhon-Selenge River basins); upper Tuul, Terelj, Onon and Balj Rivers (Hentii Mountain Range); Ulz and upper Herlen Rivers and rivers in Mongol Daguur steppe. It migrates through the breeding areas and practically all wetlands in Mongolia (except for wetlands in dense taiga forest, higher than 3,500 m asl) (Tugarinov, 1916; Kozlova, 1930&1932; Tugarinov, 1932; Tarasov, 1960; Grummit, 1961; Fischer, 1970; Kleinstäuber & Succow, 1978; Ostapenko *et al.*, 1980; Piechocki *et al.*, 1981; Mauersberger 1980&1982; Polyakov, 1912 *et al.*, 1982; Stepanyan & Bold, 1983; Potapov, 1986; Fomin & Bold, 1988; Rogacheva *et al.*, 1988; Erdenebat, 1989; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Smirenskii & Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 1,200,000 - 3,600,000 mature individuals. Global breeding and resident ranges are estimated at 14,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. During the breeding season, this species inhabits swampy areas with old pine woodland and mountain forest with many fallen and rotten tree stumps, marshy forest floors and heavy carpets of lichens and mosses, generally in the vicinity of rivers, streams, swamps, ponds, lakes and bogs. It nests in trees in the abandoned nests of passerines including thrushes, crows, jays and shrikes, but may also nest in squirrel nests and occasionally on tree stumps or amongst fallen trees on the ground. The female usually lays 4, occasionally 2-3 eggs of slightly glossy, pale creamy, tinted faint olive or green, or rarely olive-buff colour with dark purple-brown or reddish-brown spots or small blotches, or streaks. Incubation is for 20-23? days. The young leave the nest soon after hatching and move to edge of marsh or water. Both parents care for the young, later the male cares alone. They can fly at c.4 weeks. Both adults and young feed on aquatic and terrestrial arthropods and their larvae such as dragonfly larvae, ants, water bugs, moth larvae, and the adults and larvae of beetles, Diptera and Trichoptera, annelids, small crustaceans and spiders, as well as plant fragments. On migration, they stay on lake shores and other wetlands, river banks, ponds, pools and forest streams. They form small flocks consisting of 6-30 individuals during migration.

They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migrations); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ 4.1.2. Terrestrial-4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

172. Scientific Name: *Tringa glareola*

Species Authority: Linnaeus, 1758

Common Names: Wood Sandpiper (English), Shuguin högchuu (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Ecuador, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Burkina Faso, France,

Ghana, Togo, Niger, Benin, Belgium, Nigeria, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Northern Mariana Islands, Micronesia, Marshall Islands.

Regional Distribution: This species breeds at Tamir, Khanui and upper Orkhon Rivers (Khangai Mountain Range); Ider, Chuluut River basins (Tarvagatai-Bulnai Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range including Darkhad Depression); Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range). Possibly nests in valleys of the upper Ulz (Mongol Daguur Steppe) and Khalkh, Degee, and Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding territories and almost all wetlands in the Mongol-Altai Mountain Range, Great Lakes Depression, including Northern Uvs Depression; Zavkhan Desert Steppe Depression, Southern Shargyn Gobi, Khangai Mountain Range, Southern Khangai Plateau, Tarvagatai-Bulnai Mountain Ranges, Herlen-Ulz River basins, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression; oases and small lakes in the Trans-Altai Gobi and Northern Gobi (Buturlin, 1913; Kozlova, 1930&1932; Tugarinov, 1932; Tarasov, 1960; Grummit, 1961; Bold, 1965; Fischer, 1970; Bold, 1973; Sumiya, 1973; Ostapenko *et al.*, 1978; Kleinstäuber & Succow, 1978; Ostapenko *et al.*, 1980; Piechocki *et al.*, 1981; Mauersberger 1980&1982; Polyakov, 1912 *et al.*, 1982; Stepanyan & Bold, 1983; Potapov, 1986; Fomin&Bold, 1988; Rogacheva *et al.*, 1988; Erdenebat, 1989; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Smerinskii & Sumiya, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 3,100,000 - 3,500,000 mature individuals. Global breeding and resident ranges are estimated at 15,500,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. During the breeding season, this species inhabits open, swampy areas in forest, and forest steppe scrubland between tundra and coniferous forest with willow, birch and spruce, and extensive mossy, sedge or grassy marshes (Sumiya & Skryabin, 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow, sparsely lined with grass and leaves. No additional material in tree-nest sites. The female usually lays 4, rarely 3 eggs of slightly glossy, pale to very pale-greenish or olive, or rarely pale olive-buff colour with dark-brown or dark purplish-brown blotches, speckles or spots. Adult birds incubate the eggs for 22-23 days. When their down feathers are dry, the young leave the nest. Both parents care for the young. This species feeds on small arthropods, especially aquatic forms such as hydrophilic beetles and the larvae of Diptera. During the non-breeding season, this species has a more varied diet consisting of aquatic and terrestrial arthropods. On migration, they are found in open areas such as the margins of inland freshwater lakes and reservoirs, muddy marshlands, grassy stream banks, small temporary

pools, permanent swamps, and irrigation channels. This species migrates in small and large flocks consisting of 5-150 individuals. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migrations); 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

173. Scientific Name: *Xenus cinereus*

Species Authority: (Güldenstädt, 1775)

Common Names: Terek Sandpiper (English), Matigar högchuuleg or matigar högchuu (Mongolian)

Synonyms: *Scolopax terek* (Latham, 1790)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Argentina, Trinidad and Tobago, Mauritania, Gambia, Morocco, Mali, Ireland, Spain, Cote d'Ivoire, United Kingdom, France, Ghana, Togo, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Poland, Malta, South Africa, Hungary, Slovakia, Botswana, Greece, Romania, Finland, Latvia, Lithuania,

Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, New Caledonia, New Zealand, Fiji.

Regional Distribution: This species occurs on lake shores, river banks and a variety of wetlands in the Mongol-Altai and Gobi-Altai Mountain Ranges (except for high altitude areas), Kharkhiraa and Turgen Mountains, Great Lakes Depression, Zavkhan Desert Steppe Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest and high altitudes), Orkhon-Selenge River basins, Middle Khalkh and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes and Northern Gobi on migration (Buturlin, 1913; Kozlova, 1930; Tugarinov, 1916; Sushkin, 1938; Fischer, 1970; Bold, 1973; Kleinstäuber&Succow, 1978; Ostapenko *et al.*, 1980; Mauersberger 1980; Potapov, 1986; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010). Summering individuals were found at Ögii Lake of Övörkhangai province in 2005 (Tsegmid & Uuganbayar, 2006).

Population: The global population consists of 160,000 - 1,200,000 mature individuals. Global breeding and resident ranges are estimated at 11,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, it is a summer visitor and passage migrant. The species passes through open areas and wetlands such as sandbars and mudflats at river mouths, edges of swamps, and salt marsh creeks, brackish pools and riverbeds, muddy lakes and river edges by late April-early May (on spring migration) and late August-early September (on autumn migration). On its breeding grounds the diet of this species consists mainly of adult and larval midges (Diptera) as well as seeds. In non-breeding and on migration, the diet of this species is more varied, consisting of a variety of insects, small molluscs, crustaceans (including crabs), spiders and annelid worms (del Hoyo *et al.*, 1996). Migrating birds occur in small flocks of 3-15 individuals on both spring and autumn migrations.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement / see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

174. Scientific Name: *Actitis hypoleucos*

Species Authority: Linnaeus, 1758

Common Names: Common Sandpiper (English), Egel khairgynhögchuu or egel khairgyn högchuu (Mongolian)

Synonyms: *Tringa hypoleucos* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, French Southern Territories, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Vanuatu, New Zealand, Samoa, Democratic People's Republic of Korea, Republic of Korea, Kiribati.

Regional Distribution: This species breeds in the Mongol-Altai Mountain Range; Great Lakes Depression, including Northern Uvs Depression; Zavkhan Desert Steppe Depression; upper Orkhon River (Khangai Mountain Range); Tui, Baidrag Rivers (Southern Khangai Plateau); Terhiin Tsagaan, Sangiin Dalai Lakes and Ider and Chuluut Rivers (Tarvagatai-Bulnai range); Hövsgöl Mountain Range, including Darkhad Depression; lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen Rivers (Hentii Mountain Range); upper Ulz, Herlen and other rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; Khalkh, Degee, Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region); Valley of the Lakes, Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas and all types of wetlands, including oases in the Trans-Altai, Northern and Eastern Gobi (Tugarinov, 1916; Kozlova, 1930&1932; Tugarinov, 1932; Sushkin, 1938; Tarasov, 1960; Grummit, 1961; Vaurie, 1964; Fischer, 1970; Bold,

1973; Bold, 1977; Kleinstäuber & Succow, 1978; Ostapenko 1980; Piechocki *et al.*, 1981; Mauersberger 1980&1982; Polyakov, *et al.*, 1982; Sergelen, 1986; Fomin & Bold, 1988; Rogacheva *et al.*, 1988; Stephan, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Smirenskii&Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Stenzel *et al.*, 2005 Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 2,600,000 - 3,200,000 mature individuals. Global breeding and resident ranges are estimated at 25,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: It is a common breeding visitor. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. This species nests at edges of streams, rivers, lakes and pools, usually of clear water and in wooded and open areas of mountain taiga forest, forest steppe and valleys of large rivers and lakes (Sumiya & Skryabin, 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow on the ground, often by or slightly under some herbage, scantily lined with grasses. The female usually lays 4 (sometimes 3- 5) eggs of slightly glossy, pale cream or creamy-buff colour with dark reddish-brown, medium or dark brown and paler purplish grey speckles, spots, short irregular lines, and blotches. Incubation is for 20-23 days. Both sexes care for the young. They leave the nest when their down is dry. Broods begin flying at c. 21 days and living independently at c. 4 weeks. Both adults and young eat adult and larval arthropods, molluscs, snails, crustaceans, and annelids. Migrating birds occur in a variety of open wetlands such as shores and edges of lakes, river banks, sandy or rocky margins of rivers, small ponds, pools and dams, clear freshwater lake shores, creeks and oases in forest, forest steppe, steppe, desert steppe and Gobi Desert. During the migration, they form small flocks consisting of 3-15 individuals in the country. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

175. Scientific Name: *Heteroscelus brevipes*

Species Authority: (Vieillot, 1816)

Common Names: Grey-tailed Tattler or Polynesian Tattler (English), Буурал хөгчүүhei or буурал хөгчүү (Mongolian)

Synonyms: *Tringa brevipes* Vieillot, 1816

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as a rare passage migrant. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, United Kingdom, Russian Federation, Seychelles, Mauritius, French Southern Territories, British Indian Ocean Territory, China, Mongolia, Bangladesh, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Viet Nam, Singapore, Brunei Darussalam, Australia, Taiwan, Philippines, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Vanuatu, New Zealand, Fiji, Democratic People's Republic of Korea, Republic of Korea, Cook Islands.

Regional Distribution: This species migrates along river banks and lake shores in the Uvs Lake (Great Lakes Depression); Khankh, Khoroo Rivers (Hövsgöl Mountain Range) (adult female was collected by S.V. Elpatievskii at western shore of the Hövsgöl Lake on 25 July, 1903. D.Sumiya observed a bird at the delta of Khoroo River in mid-August and several birds at the same site end of August) (Sumiya&Skryabin, 1989); Herlen River and the delta of Ulz River (Tari Lake), Nömrög River (Buir Lake-Khalkh River-Khyangan region); single birds were observed in small lakes and ponds, and oases in the Trans-Altai Gobi (Jirnov&Ilenskii, 1985; Fomin & Bold, 1991; Zabelin, 1993; Ryabtsev & Bold, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000).

Population: The global population consists of 40,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a rare passage migrant. Single birds were observed in Hövsgöl Lake area, including Khoroo River, at the delta of Ulz River (Tari Lake), Nömrög, Herlen Rivers and Trans-Altai Gobi on spring and autumn migration. According to the observations, the species migrates along lake shores, river banks and edges of marshes and springs of Mongolia by late April-early May during the spring migration. Autumn migrants fly through the country by late August-early September. The duration of the migration depends on weather conditions and food resources.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers; 4. Accidental

mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 10.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

176. Scientific Name: *Heteroscelus incanus*

Species Authority: (Gmelin, 1789)

Common Names: Wandering Tattler or American Wandering Tattler (English), Tselden högchuuhei or tselden högchuu (Mongolian)

Synonyms: *Tringa incana* (Gmelin 1789); *Heteroscelus incanus* (Gmelin 1789)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Honduras, Costa Rica, Panama, Peru, Ecuador, Columbia, Chile, Russian Federation, China, Mongolia, Indonesia, Australia, Taiwan, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, United States Minor Outlying Islands, Vanuatu, New Zealand, Nauru, Fiji, Tövalu, Wallis and Futuna, Tonga, Samoa, Tokelau, American Samoa, Niue, Cook Islands, Kiribati, French Polynesia, Pitcairn.

Regional Distribution: V.S.Elpatievskii (Russian biologist) collected an adult female with summer plumage from Hövsgöl Lake. Based on this collection, Buturlin (1913) considered that this species may breed at the lake (Buturlin, 1913). D.Sumiya (NUM & MOS) collected an adult bird near Hövsgöl Lake in early August, 1972 and observed several birds at the shallow water edge of the Khoroo and Jargalant Rivers in Hövsgöl Lake in late August of the same year (Skryabin & Sumiya, 1976; Busching & Sumjaa, 1993; Dawaa *et al.*, 1994; Sumiya, 2002).

Population: The global population consists of 10,000 - 25,000 mature individuals. Global breeding and resident ranges are estimated at 1,160,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species was observed on the shore of the Hövsgöl Lake. A migrating individual was recorded in the area during the autumn migration. There is no proof for its breeding in the country, however Buturlin (1913) mentioned that it might be breeding in the area where he found an individual.

Habitat Type: Potential habitats are 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It migrates through protected areas including Hövsgöl and Important Bird Areas of Mongolia during the migration.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Charadriidae

177. Scientific Name: *Arenaria interpres*

Species Authority: (Linnaeus, 1758)

Common Names: Ruddy Turnstone or Turnstone (English), Alag khairgach or öndgön alag (Mongolian)

Subspecies in Mongolia: *A. i. interpres* (see Howard & Moore (1994&2003); Prater *et al.* (1997); Message & Taylor (2005) for further details)

Synonyms: *Tringa interpres* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic,

Slovenia, Chad, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, French Southern Territories, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, United States Minor Outlying Islands, Vanuatu, New Zealand, Nauru, Fiji, Tövalu, Tonga, Samoa, Tokelau, American Samoa, Niue, Cook Islands, Kiribati, French Polynesia.

Regional Distribution: The species migrates along the lake shores and river banks in the valleys of Uvs Lake and the delta of Tes and Torkholig Rivers, south to Khar-Us, Khar, Dörgön Lakes and the delta of Khovd River (Great Lakes Depression), east to Zavkhan and Hungui Rivers, through Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes, Tui and Baidrag Rivers, north to Hövsgöl Lake and Eg, Delgermörön Rivers including Shishgid, Dood Lake wetlands (Hövsgöl Mountain Range), Orkhon-Selenge River basins; Valley of the Lakes; Tuul, Onon, Balj Rivers (Hentii Mountain Range), Herlen-Ulz River basins; Khalkh, Degee, Nömrög Rivers and Buir, Shavar, Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930&1932; Tugarinov 1932; Bold, 1969; Fischer, 1970; Bold, 1973; Ostapenko *et al.*, 1980; Mauersberger, 1980&1981; Piechocki *et al.*, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 460,000 - 800,000 mature individuals. Global breeding and resident ranges are estimated at 2,620,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species occurs on lake shores, river banks, sandy beaches and oases in the Gobi Desert on migration. They form flocks consisting of 4-20 individuals and feed on Diptera, larval Lepidoptera, Hymenoptera, Coleoptera and spiders, insects, crustaceans, molluscs and annelids. The species arrives in the country by late April-early May (on spring migration) and leaves the country for wintering grounds by late August-early September (on autumn migration), depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.11, 5.13., 5.14.-5.17. on shores and banks on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation- 1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 9.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Scolopacidae

178. Scientific Name: *Calidris canutus*

Species Authority: (Linnaeus, 1758)

Common Names: Red Knot or Knot (English), Sharmag elseg (Mongolian)

Subspecies in Mongolia: *C. c. canutus* (see Prater *et al.* (1997) and Message & Taylor (2005) for further details)

Synonyms: *Tringa canutus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Russian Federation, Tanzania, Mozambique, Cyprus, Kenya, Israel, Jordan, Lebanon, Iraq, Georgia, Somalia, Yemen, Madagascar, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Oman, Seychelles, Pakistan, India, French Southern Territories, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Viet Nam, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, New Zealand, Fiji.

Regional Distribution: This species has been recorded on the shores of Bööntsagaan Lake (Valley of the Lakes), Uvs Lake and lakes in Great Lakes Depression (Fischer, 1970; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold, 2005); Ulz-Herlen River basins and Buir Lake on migration (Badley *et al.*, 2005).

Population: The global population consists of 1,100,000 mature individuals. Global breeding and resident ranges are estimated at 1,610,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species migrates through the country by late April-early May (on spring migration) and late August-early September (on autumn migration). They rest, roost and feed in open muddy and sandy shores of permanent and temporary lakes, bare edges of marshes, sandy beaches and flooded areas of large rivers in Mongolia. According to del Hoyo *et*

al. (1996), during the breeding season the species' diet consists predominantly of insects (mainly adult and larval Diptera, Lepidoptera, Trichoptera, Coleoptera and bees), spiders, small crustaceans, snails and worms. On migration, 1-3 individuals were observed on shores together with Dunlin, Sanderling and other small stints.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 16.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

179. Scientific Name: *Calidris alba*

Species Authority: (Pallas, 1764)

Common Names: Sanderling (English), Gurvalj elseg (Mongolian)

Synonyms: *Crocethia alba* Pallas, 1764

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands,

Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Syrian Arab Republic, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, French Southern Territories, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, New Zealand, Fiji, American Samoa, Kiribati, French Polynesia.

Regional Distribution: This species is found on lake shores and river banks in valleys of Airag Lake (Mongol-Altai Mountain Range), Uvs Lake and Tes River (Great Lakes Depression), Erhil Lake (Hövs göl Mountain Range), Ögii Lake (Khangai Mountain Range), upper Herlen, Onon, Balj Rivers (Hentii Mountain Range), Buir Lake (Buir Lake-Khalkh River-Khyangan region) and Bööntsagaan Lake (Valley of the Lakes) on migration (Bold *et al.*, 1977; Kleinstäuber&Succow, 1978; Ostapenko *et al.*, 1978&1980; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 620,000 - 700,000 mature individuals. Global breeding and resident ranges are estimated at 1,260,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this species is a passage migrant. They pass through Mongolia late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. During the migration, small flocks together with other waders prefer to stay and rest on stony and muddy shores of saline and freshwater lakes in mountain steppe, steppe, desert steppe and valleys of large rivers in Mongolia. According to del Hoyo *et al.* (1996), they feed on insects (especially adult and larval Diptera, Coleoptera and Lepidoptera), and crustaceans. Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Scolopacidae

180. Scientific Name: *Calidris minuta*

Species Authority: (Leisler, 1812)

Common Names: Little Stint (English), Odoi elseg (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Argentina, Antigua and Barbuda, Barbados, Bermuda, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Malaysia, Viet Nam, Brunei Darussalam, Australia, Hong Kong, Philippines, Japan, Papua New Guinea, Northern Mariana Islands.

Regional Distribution: The species migrates along wetlands in mountain tundra, forest steppe, mountain steppe, desert steppe and Gobi Desert from Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); Khar-Uvs, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Tui and Baidrag Rivers and many small lakes (Southern Khangai Plateau); Terhiin Tsagaan, Telmen, and Khar Lakes with wide shores and valleys and Ider and Chuluut Rivers (Tarvagatai-Bulnai Mountain Range); Hövsgöl Lake and Eg, Delgermörön Rivers (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); lower Orkhon, Selenge, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Onon, Balj, and upper Herlen Rivers (Hentii Mountain Range); lower Herlen and Ulz River; Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög Rivers and Buir, Shavar, and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes); steppe lakes, creeks and oases in Gobi (Trans-Altai, Northern and Eastern Gobi) (Berezovskii, 1881; Sushkin, 1925; Tugarinov, 1928; Kozlova, 1930&1932; Tugarinov, 1932; Vaurie, 1964; Piechocki, 1968; Bold & Eregdendagva, 1970; Bold, 1973; Kleinstäuber & Succow, 1978; Ostapenko *et al.*, 1978 & 1980; Mäuersberger 1980 & 1982; Piechocki *et al.*, 1981; Stephan, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar,

2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 1,400,000 - 1,500,000 mature individuals. Global breeding and resident ranges are estimated at 1,740,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species migrates through Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration), depending food and weather conditions. During the spring and autumn migrations, they occur in open shores and muddy edges of fresh water and saline lakes, river banks, ponds and pools. They are also rarely found in temporary small ponds in the steppe. According to del Hoyo *et al.* (1996), the diet of this species consists chiefly of invertebrates. During the breeding season larval and adult Diptera and small beetles are the primary foods, particularly the larvae of mosquitoes and crane-flies. Outside of the breeding season, the diet becomes more varied, with ants, water bugs, annelids, small molluscs, crustaceans, freshwater mites and plant material being taken as well as Diptera and beetles. They form small and large groups consisting of 3-60 individuals during the migration.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

181. Scientific Name: *Calidris ruficollis*

Species Authority: (Pallas, 1776)

Common Names: Red-necked Stint or Rufous-necked Stint (English), Sharturuut elseg or shar turuut elseg (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat

status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Peru, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Italy, Denmark, Sweden, South Africa, Finland, Russian Federation, Mozambique, Kenya, Israel, Somalia, Kazakhstan, Seychelles, India, China, Mongolia, Bangladesh, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, Vanuatu, New Zealand, Fiji.

Regional Distribution: This species passes over lake shores, river banks and other types of wetland in Northern Uvs Depression, Great Lakes Depression, Zavkhan Desert Steppe Depression, Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range), Southern Khangai and Tarvagatai-Bulnai Mountain Ranges, Hövsgöl areas and Darkhad Depression, east to Orkhon-Selenge River basins and Tuul, Onon, Balj, Herlen and Ulz Rivers, and further to Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, also creeks and oases in the Gobi (Trans-Altai, Northern and W Eastern Gobi) (Fischer, 1970; Kleinstäuber&Succow, 1978; Ostapenko *et al.*, 1978&1980; Mauersberger 1980&1982; Sumiya&Skryabin, 1989; Smirenskii&Sumiya, 1991; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 320,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species migrates across Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). The duration and timing of arrival and departure depend on food and weather conditions. Migrants feed on aquatic arthropods and worms in muddy and sandy areas at the edge of permanent and temporary lakes and large ponds during the migration. They form flocks consisting of 3-50 individuals together with Little Stints and Long-toed Stints in Mongolia.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Scolopacidae

182. Scientific Name: *Calidris temminckii*

Species Authority: (Leisler, 1812)

Common Names: Temminck's Stint (English), Temminskiin elseg (Mongolian)

Synonyms: *Tringa temminckii* Leisler, 1812

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Senegal, Mauritania, Gambia, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Czech Republic, Chad, Poland, Malta, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands.

Regional Distribution: This species migrates across banks, shores, muddy and boggy areas in valleys of rivers, lakes and oases in Mongolia-Altai and Gobi Altai mountain ranges, Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges; Orkhon, Selenge, Tuul, Onon, Balj, Herlen, Ulz River basins; Mongol Daguur, Middle Khalkh Steppes; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region. It is found in Valley of the Lakes, small lakes, springs and oases in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Bianki, 1907; Kozlova, 1932; Tugarinov, 1932; Tarasov, 1960; Fischer, 1970; Bold, 1973; Kleinstäuber&Succow, 1978; Ostapenko *et al.*, 1980; Mauersberger 1980&1982; Piechocki *et al.*, 1981; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Tseveenmyadag & Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Nyambayar &Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 170,000 - 1,300,000 mature individuals. Global breeding and resident ranges are estimated at 3,450,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. It migrates across Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). Individuals

rest and feed on open muddy and sandy lake shores, flood-lands, marsh lands with short vegetation, lake edges, river banks and artificial ponds and pools on high mountains, mountain steppe, forest steppe, desert steppe and Gobi Desert during the migration. They form small flocks, consisting of 3-20 individuals in Mongolia. They often migrate with other small waders, such as Red-necked Stint and Little Stint. According to del Hoyo *et al.* (1996), the diet of this species consists primarily of insects and their larvae (especially beetles and Diptera such as crane-flies and midges), as well as the occasional plant matter. Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

183. Scientific Name: *Calidris subminuta*

Species Authority: (Middendorff, 1851)

Common Names: Long-toed Stint (English), Savar elseg (Mongolian)

Synonyms: *Tringa subminuta* Middendorff, 1851

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Ireland, United Kingdom, Sweden, Greece, Egypt, Russian Federation, Kenya, Israel, Saudi Arabia, Yemen, Islamic Republic of Iran, Kazakhstan, Bahrain, Oman, Seychelles, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Christmas Island,

Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Micronesia, Solomon Islands.

Regional Distribution: This species migrates along river banks and lake shores in valleys of Uvs Lake and the delta of Tes Torkholig Rivers, south to most lakes and rivers in Great Lakes Depression; Zavkhan and Hungui Rivers; Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes, Tui and Baidrag Rivers and small lakes in Southern Khangai Plateau; Terhiin Tsagaan, Telmen, Khar Lakes (Khangai Mountain Range); Hövsgöl Lake and Eg, Delgermörön Rivers; Shishgid, Dood Lake wetlands of Darkhad Depression (Hövsgöl Mountain Range); Orkhon and Selenge River basins; Tuul, Onon, Balj and upper Herlen Rivers, east to lower Herlen-Ulz River basins; Buir Lake-Khalkh River-Khyangan region and Valley of the Lakes. Records exist from small lakes, creeks and oases in the Gobi (Trans-Altai, Northern and Eastern Gobi) (Kozlova, 1930&1932; Tugarinov, 1932; Dementiev *et al.*, 1966; Piechocki, 1968; Bold, 1969; Bold & Eregdendagva, 1970; Bold, 1973; Ostapenko *et al.*, 1977; Kleinstäuber&Succow, 1978; Ostapenko *et al.*, 1978 & 1980; Mauersberger 1980&1982; Piechocki *et al.*, 1981; Stephan, 1988; Erdenebat, 1989; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 25,000 mature individuals. Global breeding and resident ranges are estimated at 316,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species migrates through the country by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. They feed and rest on open muddy shores, shallow edges of water of permanent and temporary lakes, large rivers, swamps, and ponds, flood plains of large rivers, and short vegetated marshes and meadows. It forms small groups with 3-8 individuals, rarely 10-30 individuals. According to del Hoyo *et al.* (1996), its diet includes insects (e.g. Carabidae beetles), small gastropod molluscs, crustaceans and seeds.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Scolopacidae

184. Scientific Name: *Calidris melanotos*

Species Authority: (Vieillot, 1819)

Common Names: Pectoral Sandpiper (English), Orog elseg (Mongolian)

Synonyms: *Tringa melanotos* Vieillot, 1819

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands, British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Senegal, Morocco, Sierra Leone, Ireland, Portugal, Spain, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, France, Ghana, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Denmark, Gabon, Sao Tome and Principe, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Namibia, Czech Republic, Poland, Malta, South Africa, Hungary, Slovakia, Botswana, Romania, Finland, Zambia, Egypt, Zimbabwe, Russian Federation, Burundi, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, United Arab Emirates, Seychelles, India, China, Australia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, Marshall Islands, United States Minor Outlying Islands, Vanuatu, New Zealand, Fiji, Niue, Kiribati, French Polynesia.

Regional Distribution: A single bird has been recorded in Dornod province in August (A.Bräunlich, pers. comm.). S.Gombobaatar and an American birder photographed a single bird together with 7 Sharp-tailed Sandpipers at Tsagaan Lake shore near N Norovlin sum of Hentii province on 30 August, 2010 (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 25,000 - 100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. During the autumn migration, the species migrates along eastern Mongolia by late August-early September. It is easily confused with Sharp-tailed Sandpiper in the field. On migration, they prefer to feed and rest in open muddy shores of temporary and permanent saline and freshwater lakes and wide sandy beaches of large rivers. They feed on aquatic insects and other arthropods.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and

legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, the species migrates through some protected areas and Important Bird Areas in the east.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

185. Scientific Name: *Calidris acuminata*

Species Authority: (Horsfield, 1821)

Common Names: Sharp-tailed Sandpiper (English), Suul elseg (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Ireland, Portugal, Saint Helena, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Denmark, Austria, Sweden, Finland, Russian Federation, Yemen, Madagascar, Kazakhstan, Seychelles, Pakistan, India, China, Sri Lanka, Mongolia, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Viet Nam, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, United States Minor Outlying Islands, Vanuatu, New Zealand, Nauru, Fiji, Tonga, Kiribati.

Regional Distribution: This species migrates along river banks and lake shores in Northern Uvs Depression, Great Lakes Depression, Zavkhan Desert Steppe Depression, Khangai and Hövsgöl Mountain Ranges, Orkhon-Selenge River basins, Hentii Mountain Range (Tuul, Onon, Balj, Herlen, Ulz Rivers), Middle Khalkh Steppe and Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region. It is also found at Bööntsagaan, Orog, and Taatsyn Tsagaan Lakes in Valley of the Lakes (Kozlova, 1930; Vaurie, 1964; Piechocki, 1958; Bold & Eregdendagva, 1970; Bold, 1973; Ostapenko *et al.*, 1980; Mauersberger 1980; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008).

Population: The global population consists of 160,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. This species migrates across the country by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. It is found in open muddy, rocky and bare shores of temporary and permanent saline and freshwater lakes and wide sandy beaches of large rivers, muddy edges of marshes and flooded areas. The diet of this species consists of arthropods, including adult insects and their larvae, worms, molluscs, and crustaceans. During the migration, groups of 3-20 individuals forage on margins of lakes and rivers with other shore birds.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ - 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

186. Scientific Name: *Calidris alpina*

Species Authority: (Linnaeus, 1758)

Common Names: Dunlin (English), Khar elseg (Mongolian)

Subspecies in Mongolia: *C. a. sakhalina*, *C. a. alpina* (see Howard & Moore (1994); Prater *et al.* (1997); Message & Taylor (2005) for further details)

Synonyms: *Tringa alpina* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, as well as drought, it has been assessed as Least Concern owing to its relatively common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, Belize, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Bahamas, Venezuela, Turks and Caicos Islands, Dominican Republic, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Burundi, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Northern Mariana Islands, Micronesia, United States Minor Outlying Islands, New Zealand.

Regional Distribution: This species is found on lake shores and river banks in valleys of Uvs Lake and the delta of Tes and Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Hövsgöl Lake and Delgermörön, Eg Rivers; lakes and rivers in Darkhad Depression (Hövsgöl Mountain Range); Onon, Balj, Herlen and Ulz Rivers (Hentii Mountain Range), Khalkh, Degee, Nömrög Rivers and Buir, Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Molleson, 1896; Sushkin, 1925; Tugarinov, 1929; Kozlova, 1930; Tugarinov, 1932; Sushkin, 1938; Vaurie, 1964; Piechocki, 1968; Bold & Eregdendagva, 1970; Fischer, 1970; Kleinstäuber&Succow, 1978; Mauersberger 1980; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Gombobaatar *et al.*, 2008). Several birds were observed at Terkhiiin Tsagaan and Sangiin Dalai of Övörkhangai province; Borogchin Lake, and Ögii Lakes and the lakes of Northern Khangai (Khangai Mountain Range), Bööntsagaan and Orog Lakes of the Valley of the Lakes (S.Gombobaatar pers. comm.).

Population: The global population consists of 4,600,000 - 6,500,000 mature individuals. Global breeding and resident ranges are estimated at 4,960,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species passes through the country by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. Feeding, resting, refueling and roosting habitats in Mongolia are muddy and rocky shores of freshwater and saline lakes, a wide variety of freshwater and brackish wetlands, flooded fields, and wide sandy beaches of large lakes. During the migration, small flocks consisting of 6-30 birds were observed in Mongolia. According to del Hoyo *et al.* (1996), it is omnivorous, consuming mostly polychaete worms and small gastropods, as well as insects (Diptera flies and beetles), crustaceans, plant matter and occasionally small fish.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive

habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

187. Scientific Name: *Calidris ferruginea*

Species Authority: (Pontoppidan, 1763)

Common Names: Curlew Sandpiper (English), Khaduur elseg (Mongolian)

Synonyms: *Tringa ferruginea* Brunnich, 1764

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Costa Rica, Peru, Ecuador, Argentina, Puerto Rico, Virgin Islands, U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Albania, Botswana, Greece, Romania, Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, French Southern Territories, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Republic of Korea, Japan, Palau, Papua New Guinea, Micronesia, Solomon Islands, New Caledonia, New Zealand.

Regional Distribution: This species migrates along river banks, lake shores and other wetlands in valleys of Uvs Lake and the delta of Tes Torkholig Rivers (Northern Uvs Depression); Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression), east to lakes and rivers in the Khangai Mountain Range and Hövsgöl region, further to Orkhon-Selenge River basins, Herlen-Ulz River basins and Buir Lake-Khalkh River-Khyangan region. It has been recorded in Bööntsagaan, Orog, and Taatsyn Tsagaan Lakes, temporary steppe lakes, springs and oases in the Gobi (Trans-Altai, Northern and W Eastern Gobi) (Bianki, 1915; Kozlova, 1930&1932; Tugarinov, 1932; Sushkin, 1938; Tarasov, 1960; Vaurie, 1964; Bold & Eregdendagva, 1970; Fischer, 1970; Bold, 1973; Kleinstäuber&Succow, 1978; Mauersberger 1980; Ostapenko *et al.*, 1980; Potapov, 1986; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 1,800,000 - 1,900,000 mature individuals. Global breeding and resident ranges are estimated at 1,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. The species passes through open muddy, rocky and bare shores of temporary and permanent saline and freshwater lakes and wide sandy beaches of large rivers, muddy edges of marshes and flooded areas across Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. According to del Hoyo *et al.* (1996), the diet of this species consists mainly of insects, such as the adults, pupae and larvae of Diptera and beetles, polychaete worms, molluscs, and crustaceans occasionally seeds. It forms flocks consisting of 3-30 individuals and forages on margins of lakes and rivers during the spring and autumn migrations. They stay and rest together with Red-necked Stint, Little Stint and other Sandpipers.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

188. Scientific Name: *Limicola falcinellus*

Species Authority: (Pontoppidan, 1763)

Common Names: Broad-billed Sandpiper (English), Syambi shalchig or syambi elseg (Mongolian)

Subspecies in Mongolia: *L. f. falcinellus*, *L. f. sibirica* (see Howard & Moore (1994); Prater *et al.* (1997); Wild Bird Society of Japan (2000); Message & Taylor (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, Iceland, Mauritania, Morocco, Mali, Ireland, Portugal, Faroe Islands, France, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Tanzania, Uganda, Mozambique, Cyprus, Malawi, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Solomon Islands, New Zealand.

Regional Distribution: This species migrates across lake and river valleys in Great Lakes Depression, Ögii Lake (Khangai Mountain Range), the lakes in North and S Khangai Mountain Range, and Valley of the Lakes; Tuul, Onon, Balj, Herlen River basins (Hentii Mountain Range), lower Herlen and Ulz Rivers (Middle Khalkh and Mongol Daguur Steppe), Khalkh, Degee, Nömrög Rivers and Buir, Shavar, Tashgain Tavan, Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); temporary lakes, springs and oases in the Gobi (Trans-Altai, Northern and W Eastern Gobi) (Kozlova, 1930; Kleinstäuber *et al.*, 1978; Ostapenko *et al.*, 1980; Mauersberger, 1980; Piechocki *et al.*, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Tseveenmyadag *et al.*, 2005; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 71,000 - 160,000 mature individuals. Global breeding and resident ranges are estimated at 1,010,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a passage migrant. They migrate through the country by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. During the migration, 1-20 birds are found together on muddy and boggy areas on the shores of ponds and fresh water and saline lakes, swamps, flooded areas of mountain steppe, forest steppe, and desert steppe in Mongolia. Del Hoyo *et al.* (1996) mentioned that this species is omnivorous, its diet consisting of snails, crustaceans, adult and larval insects (e.g. beetles, flies, grasshoppers, ants).

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism/ recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 11.0% of the species' range in Mongolia occurs within protected areas.

189. Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

Scientific Name: *Philomachus pugnax*

Species Authority: (Linnaeus, 1758)

Common Names: Ruff (English), Notsoo noololdoi or noololdoi (Mongolian)

Synonyms: *Tringa pugnax* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, Costa Rica, Panama, Cayman Islands, Peru, Jamaica, Korea, Democratic Republic, Columbia, Brazil, Venezuela, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Monaco, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard People's Republic of, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine,

Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Republic of Korea, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Jan Mayen, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, Marshall Islands, United States Minor Outlying Islands, New Zealand.

Regional Distribution: This species breeds at Airag Lake, upper Tuul and Herlen Rivers. It migrates through the breeding areas and various wetlands in Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges, Orkhon-Selenge River basins, Herlen-Ulz River basins, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, oases in the Trans-Altai Gobi, small lakes in Northern and Eastern Gobi (Kozlova, 1932; Bold, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Bräunlich, 2006a; Boldbaatar, 2008; Gombobaatar *et al.*, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). It is observed at Ögii Lake in Övörkhangaï province (Bold & Batsaikhan 2006)

Population: The global population consists of 2,000,000 - 2,600,000 mature individuals. Global breeding and resident ranges are estimated at 8,580,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It breeds in low marshy areas, or grassy meadows by water, or moist grassy areas, or tundra with low vegetation. The nest is on the ground, concealed in tall grasses. Males perform communal displays on open ground and are promiscuous. Females lay usually 4, rarely 3 eggs of slightly glossy, pale olive or green with dark olive-brown or blackish-brown, and pale violet-grey small irregular blotches, spots, and specks. The females incubate the eggs for 20-21 days. The young leave the nest soon after hatching. The females care for the young and feed them with insects for several days, then they feed themselves. On migration, they inhabit small shallow lakes with marginal vegetation, grassy hummocky marshes with shallow pools, lake shores, and usually roost at night in the shallow waters of lake shores. During the breeding season, the species feeds on adult and larval terrestrial and aquatic insects such as Coleoptera and Diptera (del Hoyo *et al.*, 1996). On passage and during the winter, the species takes insects (e.g. caddis flies, water-bugs, mayflies and grasshoppers), small crustaceans, spiders, small molluscs, annelid worms, frogs, small fish and the seeds of rice and other cereals, sedges, grasses and aquatic plants (del Hoyo *et al.*, 1996). On migration, they form small to large flocks consisting of 4-30 individuals, resting and feeding on shores, sandy banks and edges of shallow ponds in Mongolia. They leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/ -1.4.6. Dams /after the construction of two hydroelectric dams on Dörgön and Taishir Rivers, intensive habitat droughts, dying of reed beds, marsh grasses and wetlands/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying

at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

190. Scientific Name: *Phalaropus lobatus*

Species Authority: (Linnaeus, 1758)

Common Names: Red-necked Phalarope (English), Nariin seleehei (Mongolian)

Synonyms: *Tringa lobata* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tsevenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Argentina, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Mauritania, Morocco, Sierra Leone, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Serbia, Greece, Romania, Finland, Latvia, Sudan, Zambia, Ukraine, Estonia, Egypt, Turkey, Moldova, Russian Federation, Burundi, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea, New Zealand.

Regional Distribution: This species has been recorded on lake shores, river banks and other wetlands in the Mongol-Altai Mountain Range (except for alpine lakes and wetlands); Great Lakes Depression; Zavkhan Desert Steppe Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for taiga and high altitude areas); Orkhon-Selenge River basins; Herlen-Ulz River basins; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes and the Gobi (Trans-Altai, Alashani, and Eastern Gobi) on migration (Kozlova, 1932; Sushkin, 1938; Vaurie, 1964; Kleinstäuber&Succow, 1978; Mauersberger

1980; Piechocki *et al.*, 1981; Mauersberger 1982; Potapov, 1986; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Terbish & Gombobaatar, 2003; Delgermaa *et al.*, 2004; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Gombobaatar *et al.*, 2008).

Population: The global population consists of 3,600,000 - 4,500,000 mature individuals. Global breeding and resident ranges are estimated at 9,140,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. It migrates through edges and shallow areas of saline and freshwater lakes, shallow ponds and pools near marsh land by late April-early May (spring migration), and late August-early September (autumn migration), depending on food availability and weather conditions. Its diet consists of insects (especially adult and larval Diptera, beetles, ants and Hemiptera) and other small invertebrates (e.g. snails, crustaceans and annelid worms), larval amphibians (tadpoles) and seeds (del Hoyo *et al.*, 1996). They migrate in small flocks consisting of 2-6 birds in Mongolia on both spring and autumn migrations.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement / see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Scolopacidae

191. Scientific Name: *Phalaropus fulicarius*

Species Authority: (Linnaeus, 1758)

Common Names: Red Phalarope or grey phalarope (English), Ulaan seeleehei (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Ecuador, Egypt, El Salvador, Canada, United States, Mexico, Guatemala, Honduras, Costa Rica, Cuba, Peru, Columbia, Chile, Brazil, Argentina, Virgin Islands U.S., Paraguay, Antigua and Barbuda, Barbados, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Cape Verde, Senegal,

Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Liberia, Ireland, Portugal, Spain, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Botswana, Greece, Romania, Finland, Ukraine, Bulgaria, Zimbabwe, Russian Federation, Mozambique, Cyprus, Kenya, Israel, Saudi Arabia, Iraq, Yemen, Islamic Republic of Iran, Kazakhstan, Kuwait, Oman, Tajikistan, India, China, Malaysia, Australia, Hong Kong, Taiwan, Philippines, Republic of Korea, Japan, New Zealand, Kiribati.

Regional Distribution: J. Feibig and A. Sichtung (German biologists) and N. Batsaikhan (NUM) documented a first year bird foraging together with five individuals of Red-necked Phalaropes at Zulganai oasis of Ömnögobi province (43°44.716'N; 100°02.952'E) on 30 August and 2 September, 2004 (Robson, 2005; Tseveenmyadag & Bold, 2006). A total of 6 individuals were seen 50 km south of Nomgon sum of Ömnögobi province (Stenzel *et al.*, 2005). Ch. Uuganbayar (State University of Agriculture and Mongolian Ornithological Society), Dr Bernd Nicolai and his German team photographed a single bird staging with other waders in SE corner of Galuut Lake at Chuluunkhoroot sum of Dornod province on 17 July, 2009 (Ch. Uuganbayar pers. comm. and photographs).

Population: The global population consists of 1,100,000 - 2,000,000 mature individuals. Global breeding and resident ranges are estimated at 3,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Recent records show that the species migrates along open lake shores and oases in eastern and southern Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. These observations and the principal migration routes of Mongolia imply that it may also migrate through wetlands in central and western Mongolia. During the breeding season, the diet consists chiefly of invertebrates, such as adult and larval insects (e.g. beetles, caddis flies, diptera flies, bugs), molluscs, crustaceans, annelid worms, spiders, mites, and occasionally plant material (seeds) when animal matter is scarce (del Hoyo *et al.*, 1996).

Habitat Type: Potential habitats are 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3;/ 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock;/ 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.5. Pathogens /highly pathogenic avian influenza;/ 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Habitat Type: 5. Wetlands (5.1.-5.9., 5.10., 5.13., 5.14.-5.17. on shores and banks).

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates through some protected areas and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Glareolidae

192. Scientific Name: *Glareola maldivarum*

Species Authority: Forster, 1795

Common Names: Oriental Pratincole, Eastern-collared Pratincole or Eastern pratincole (English), Ukhaa högt or ukhaa sugat högt (Mongolian)

Synonyms: *Glareola maldivarus* Forster, 1795

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size and the range of breeding and migrating are unknown. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient.

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: United States, United Kingdom, Egypt, Russian Federation, Cyprus, Israel, Seychelles, Mauritius, Pakistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, New Zealand.

Regional Distribution: In Mongolia, it migrates from Ulz River valley through Eastern Mongolian steppe to Buir Lake and Khalkh, Nömrög River valleys. Single individual was observed near Zuunmod town in Sergelen sum of Töv province. This species may breed in short vegetated dry steppe and meadows along river valleys of Herlen and Ulz basins. However, there is no proof for its breeding in these areas yet (Tugarinov, 1932; Mauersberger, 1980; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000).

Population: The global population consists of 2,900,000 - 3,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia and possibly a breeding visitor. They migrate through eastern Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions of the year. The biology of the species is not well known. However, they breed at dry, stony, open steppe near lakes and rivers with sparse vegetation. It is a colonial, ground-nesting species. Both adults and young eat terrestrial arthropods and their larvae. On migration, they form flocks consisting of 3-6 individuals and feed on insects on the ground and as well as in the air. They fly at a great height for long periods of time. During the migration, they rest on lake shores and sandy banks of large rivers.

Habitat Type: 4. Grassland (4.4.); 5. Wetlands (on shores and banks of the 5.1., 5.2., 5.5., 5.6.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Livestock graze in breeding and resting sites where this species possibly breed and rest. The overgrazing of livestock is a cause of habitat degradation associated with drought of the dry steppe and wetlands.

1.3. Extraction-1.3.1. Mining: Oil mining in eastern Mongolian plain has directly and indirectly affected the species during the migration and breeding periods.

1.4. Infrastructure development-1.4.2. Human settlement: Developments of human settlement for oil mining activities near resting and breeding sites are major threats to the species.

- 1.7. Fires: Steppe fires may burn resting, feeding and breeding habitats near lakes and rivers.
4. Accidental mortality-4.1. By-catch-4.1.2.3. Poisoning, 4.2. Collision -4.2.1. Pylon and building collision: Bromadilone against Brandt's Vole (*Lasiopodomys brandti*) and collision are potential threat to the species.
5. Persecution-5.1. Pest control: See 4.1.2.3.
6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a potential threat to breeding success of the species.
7. Natural disasters-7.1. Drought: Steppe and wetlands in the east are important habitats for the species. Due to the drought of the last few years, important sites have dried out and the birds have been losing their breeding, resting, roosting and refueling habitats.
8. Changes in native species dynamics- 8.2. Predators: Carnivores such as Grey Wolf (*Canis lupus*) and Eurasian Badger (*Meles meles*) in the region prey upon the flightless and slow-moving chicks at night. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.
- 8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.
10. Human disturbance-10.4. Transport: Transport of cars near oil mining areas has negatively affected the individuals as they migrate and feed.
- 10.5. Fire: See 1.7.

Conservation Measures: Approximately 6.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Laridae

193. Scientific Name: *Larus crassirostris*

Species Authority: Vieillot, 1818

Common Names: Black-tailed Gull or Japanese Gull (English), Kharsuult tsakhilai or khar suult tsakhilai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Unknown.

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Russian Federation, China, Thailand, Viet Nam, Australia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: A single bird was observed in Döröö Lake of Dornod province in April (Bold & Mainjargal, 2006).

Population: The global population consists of 1,100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There is only one record in eastern Mongolia on spring migration. It might migrate through eastern Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). The species occurs on muddy and stony

shores of the lake. It is found on open lake shores, river banks, and sandy beaches of lakes and sand bars and islands of lakes and rivers with other gulls. del Hoyo *et al.* (1996) mentioned that its diet varies locally and annually, but includes small crustaceans, insects, molluscs, polychaetes, and fishes.

Habitat Type: Potential habitats are 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. Bycatch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates across some protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

194. Scientific Name: *Larus canus*

Species Authority: Linnaeus, 1758

Common Names: Mew Gull or Common Gull (English), Uulen tsakhilai (Mongolian)

Subspecies in Mongolia: *L. c. heinei* (see Olson & Larsson (2003) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Greenland, Iceland, Senegal, Mauritania, Gambia, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Islamic Republic of Iran, Kazakhstan, Kuwait, United Arab Emirates, Oman, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Bhutan, Myanmar, Viet Nam, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan. It is regionally extinct in Turkmenistan.

Regional Distribution: This species breeds at Uvs Lake (Northern Uvs Depression), Khar-Uls and Khar

Lakes (Great Lakes Depression) and possibly Khyangan and Khangai Mountain ranges (Fomin&Bold, 1991; Bold, 1973). It migrates through valleys of Uvs Lake and the delta of Tes Nariin, and Torkholig Rivers (Northern Uvs Depression), Khar-Uus, Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); Tamir, Khanui, upper Orkhon Rivers and Sangiin Dalai, Ögii, Terhiin Tsagaan, Telmen, and Khar Lakes (Khangai Mountain Range); Hövsgöl Lake and Eg River and Shishgid, Dood Lake wetlands (Darkhad Depression) (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, and Kharaa Rivers (Orkhon-Selenge River basins); Tuul, Onon, and Balj Rivers (Hentii Mountain Range); Ulz, Herlen, other rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; Khalkh, Degee, and Nömrög Rivers; and Buir, Shavar and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region); Bulgan River (Baruunkhurai Depression); Bööntsagaan Lake (Valley of the Lakes) and Dariganga Lake of Sukhbaatar province (Kozlova, 1930; Tugarinov, 1932; Bold, 1969; Fisher, 1972; Mauersberger, 1982; Rogacheva, 1988; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Bolortsetseg, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010). Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 2,500,000 - 3,700,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor. Migrants arrive in breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs nest in colonies, sometimes in single pairs, on islands in lakes and large rivers (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is built mainly by female and is a shallow hollow with a variable accumulation of nearby plants such as dried sedge grasses and reeds. The female usually lays 3, rarely 1-4 eggs of slightly glossy, light olive, greenish, or buffish colour with brown, dark brown, black or olive spots, blotches, specks, or short scrawls. They incubate the eggs for 22-27 days. Young leave nest in first day or two but remain near by. Both parents care for and feed them near the nest. The young can fly at c.4 weeks and fly well at 5 weeks. Both young and adults feed on earthworms, insects, aquatic and terrestrial invertebrates (planktonic crustaceans, molluscs) and small fishes. After breeding season, young and adults forage in flocks of 8-30 individuals on grassy and rocky river banks, islands, on sandy beaches, sandy or stony bars or small islets in streams or rivers, near small pools and flooded areas of large rivers. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /two hydroelectric dams -the Dörgön and the Taishir made significant changes like drought of lakes and channel/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 8.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Laridae

195. Scientific Name: *Larus hyperboreus*

Species Authority: Gunnerus, 1767

Common Names: Glaucous Gull (English), Mösnii tsakhilai (Mongolian)

Subspecies in Mongolia: *L. h. pallidissimus* (see Howard & Moore (1994) and Olson & Larsson (2003) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Morocco, Ireland, Portugal, Spain, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Hungary, Slovakia, Montenegro, Romania, Finland, Latvia, Lithuania, Ukraine, Estonia, Russian Federation, Israel, Jordan, Kazakhstan, China, Mongolia, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: D.Sumiya (NUM & MOS) recorded a single bird together with a colony of Mongolian Gulls at a delta of Khoroo River in Hövsgöl Lake on 6 August, 1971 (Sumiya & Skryabin, 1989; Mauersberger *et al.*, 1983; Dawaa *et al.*, 1994; Sumiya, 2002; Boldbaatar, 2005a; Boldbaatar, 2008). It is a rare migrant in early spring at Uvs Lake of Uvs Depression (Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 340,000 - 2,400,000 mature individuals. Global breeding and resident ranges are estimated at 3,440,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Single individuals of the species were observed on muddy shores and river banks while migrating through the Great Lakes Depression, W Mongolia during the spring (late April-early May) and autumn (late August-early September) migration. According to del Hoyo *et al.* (1996), its diet consists of insects, molluscs, crustaceans, fish, adult and young birds, eggs of birds, rodents, berries and carrion.

Habitat Type: Potential habitats are 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: It migrates across some protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

196. Scientific Name: *Larus mongolicus*

Species Authority: Sushkin, 1925

Common Names: Mongolian Gull, Mongolian Gull (English), Uher tsakhilai (Mongolian)

Synonyms: *Larus argentatus* Pontoppidan, 1763

Subspecies: *Larus argentatus mongolicus* Sushkin, 1925

Taxonomic Note: The following species level treatment, shown with subspecific placements, has been adopted by the BirdLife Taxonomic Working Group: *L. fuscus* (with *intermedius*, *graellsii*, *heuglini*, *taimyrensis* and *barabensis*); *L. argentatus* (with *argenteus*, *smithsonianus*, *vegae* and *mongolicus*); *L. michahellis* (with *atlantis* and *armenicus*) and *L. cachinnans*. This treatment is based on evidence of sympatry, and morphological and behavioural differences, but rejects further splits derived from phylogenetic analyses based on mtDNA (BirdLife International, 2011). However we have not adopted the BirdLife International (2011) taxonomy for this species due to the ongoing discussions.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France, Belgium, Nigeria, Netherlands, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Ukraine, Bulgaria, Belarus, Egypt, Turkey, Moldova, Russian Federation, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Thailand, Viet Nam, Cambodia, Japan.

Regional Distribution: This species breeds at Aчит, Uureg and other lakes (Mongol-Altai Mountain Range); almost all lakes in Great Lakes Depression are suitable for breeding; Khangai, Hövsgöl (600-650 breeding pairs at Khoroo River; 1,000-1,100 pairs at Khankh River; 500-550 breeding pairs on Chuluun Huis island, totaling 5,000 individuals at Hövsgöl Lake areas) (Sumiya & Skryabin, 1983 & 1989) and Hentii Mountain Ranges; Ulz, Herlen and other rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes. It migrates right across Mongolia including dry steppe, Gobi Desert, oases and lake and river valleys (except for dense taiga forest and high mountains greater than 3,000 m asl) in different natural zones and belts (Berezovskii, 1881; Bianki, 1907; Dorogostaiskii, 1908; Tkachenko, 1920; Kozlova, 1930; Sushkin, 1938; Eregdendagva, 1960; Bold, 1962; Dementiev & Naumov, 1966; Bold, 1970; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bayarkhuu, 1998; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Bayarkhuu, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003 Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 2,700,000 - 5,700,000 mature individuals. Global breeding and resident ranges are estimated at 19,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia, arriving in breeding sites by late April-early May. Breeding season continues from May-July. It nests in large colonies, on cliffs on shores and banks, on islands in steppe lakes and rivers with reed beds, and swampy lowland in lake and river valleys (Sumiya & Skryabin, 1983 & 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Stick nest is built on the ground by both adults using dried grasses, reeds and sedge grasses. The female usually lays 2-3, occasionally 4-5 eggs of a non-glossy, light olive buffish or greenish colour with black, dark brown, dark olive or blue to deep brownish speckles, spots and blotches. Both parents incubate the eggs for 25-33 days. Young are tended by both parents. The broods begin to fly at c.6 weeks. Sumiya (1976) counted 600-650 nests at the delta of Khoroo River and 1,000 nests at the delta of Khankh River of Hövsgöl province. Both young and adults feed on a variety of aquatic invertebrates, fishes, commercial fishing waste, lizards, eggs of other birds, Brandt's Vole and carrion. During the non-breeding season, they inhabit shores of saline and freshwater lakes, river banks, islands, creeks and dry steppe where the number of Brandt's Vole is high. On spring migration, they feed on live and dead voles in the steppe. After the breeding season, they form small to large flocks consisting of 5-120 individuals, on lakes shores and river banks. They leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.6., 12.9. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /two hydroelectric dams -the Dörgön and the Taishir made significant changes like drought of lakes and channel/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ -4.1.1.5. Poisoning /use of rodenticide against Brandt's Vole in the steppe (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /Grey Wolf (*Canis lupus*), Eurasian Badger (*Meles meles*) and Red Fox (*Vulpes vulpes*) prey upon eggs and chicks in the nest/ -8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza. Mongolian Gulls were infected by highly pathogenic avian influenza viruses (H4N6 & H3N8) at Gun Galuut of Bayandelger sum of Tuv province in 2009 and at Khar-Us Lake of Khovd province in 2009 (Batchuluun & Damdindorj, 2011). /; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

197. Scientific Name: *Larus ichthyaetus*

Species Authority: Pallas, 1773

Common Names: Pallas's Gull or Great Black-headed Gull (English), Itelgen tsakhilai (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence in western and south-western Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Portugal, United Kingdom, France, Belgium, Netherlands, Norway, Italy, Tunisia, Denmark, Austria, Sweden, Poland, Malta, Hungary, Greece, Romania, Latvia, Sudan, Ukraine, Egypt, Turkey, Russian Federation, Uganda, Cyprus, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Yemen, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Hong Kong, Japan. It is regionally extinct in Turkmenistan.

Regional Distribution: This species breeds at Tolbo, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Uvs, Khar-Us, Khar, Khyargas Lakes, Torkhilog and Tes Rivers (Great Lakes Depression) and Bööntsagaan, Orog Lakes (Valley of the Lakes). It migrates through the breeding areas, large lakes and rarely dry steppe in Great Lakes Depression, lakes in N Khangai including Ögii Lake (Khangai Mountain Range) (Tsegmid & Uuganbayar, 2006), Delgermörön River valley and Hövsgöl Lake (Hövsgöl Mountain Range) (Kozlova, 1930; Sushkin, 1925; Piechocki, 1968; Fisher, 1970; Bold, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Bold & Batsaikhan 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010). In June 2006, c. 1,500 pairs were found at Khyargas Lake in western Mongolia (Bräunlich, 2006a).

Population: The global population consists of 50,000 - 1,100,000 mature individuals. Global breeding and resident ranges are estimated at 4,880,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It breeds in large colonies, on open shores and islands in large lakes with fishes (Gombobaatar, 2012). Nest-site is situated on edges or sand-banks of shallow inland waters, lakes or on reedy islands of larger rivers. The nest is a shallow hollow on the ground in sand banks, usually unlined or with sparse dead reeds. The female usually lays 2-3, sometimes 4 eggs of a non-glossy or slightly glossy, pale, creamy or tinted yellowish, buffish or greenish, or light olive or buff colour with blackish-brown, brown or olive-brown markings and many grey or blue-grey spot and small blotches. Incubation is for 26 days. Both parents care for the broods and remain near nest. They feed on fish, chicks of other birds, amphibians, aquatic invertebrates, voles, grasshoppers, carrion and often steal food from other gulls and terns. On migration, they form flocks consisting of 4-200 individuals, feed and rest on muddy shores, shallow water areas of saline and freshwater lakes, islands of lakes and large rivers, pools and marshes, cliffs and high river banks, sandy beaches of large rivers and flooded wetlands. Non-breeding birds rest on lake shores and river banks in summer. They

leave their breeding and summering sites for wintering grounds by late August-early September.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.6., 12.9. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /two hydroelectric dams -the Dörgön and the Taishir made significant changes like drought of lakes and channel /; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ -4.1.1.5. Poisoning /use of rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Approximately 13.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Laridae

198. Scientific Name: *Larus brunnicephalus*

Species Authority: Jerdon, 1840

Common Names: Brown-headed Gull (English), Bortolgoit tsakhilai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Russian Federation, Israel, Islamic Republic of Iran, Oman, Uzbekistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore.

Regional Distribution: J.Lidster and A.Bräunlich (German birdwatchers) observed a second-year bird at Bööntsagaan Lake of Bayankhongor province (Valley of the Lakes) on 7 June, 2004 (A.Bräunlich pers. comm.). N.Tsevenmyadag, B.Nyambayar (MAS), Simba Chan (BirdLife International-Asia) and Ts.Munkhzul recorded 3 individuals together with a flock of Black-headed Gulls on the western shore of Uvs Lake of Uvs province on 5 July, 2004 (Bold, 2005; Tsevenmyadag & Bold, 2006).

Population: The global population consists of 100,000 - 200,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The species migrates through Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). There are only 4 records in two different areas of the country. It feeds on aquatic and terrestrial invertebrates like insects and their larvae, small fish and young voles (del Hoyo *et al.*, 1996).

Habitat Type: Potential habitats are 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /two hydroelectric dams -the Dörgön and the Taishir made significant changes like drought of lakes and channel /; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates across some protected areas and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

199. Scientific Name: *Larus ridibundus*

Species Authority: Linnaeus, 1766

Common Names: Black-headed Gull or Common Black-headed Gull (English), Hurentolgoit tsakhlai or huren tolgoit tsakhlai (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Cuba, Bahamas, Turks and Caicos Islands, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon,

Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Angola, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands.

Regional Distribution: This species breeds at Tolbo, Dayan, Achit, Uureg Lakes (Mongol-Altai Mountain Range); Uvs, Khar-Us, Khar, Dörgön, Khyargas, Airag Lakes (Great Lakes Depression); Sangiin Dalai, Ögii, Terhiin Tsagaan, Telmen, Khar Lakes (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Orkhon-Selenge River basins; Tuul, Onon, Balj, Herlen, Ulz Rivers (Hentii Mountain Range); Höh, Galuut, Bus, Khaichiin Tsagaan Lakes (Eastern Mongolia); Buir, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes). It migrates through the breeding areas, lake shores, river banks in Gobi-Altai Mountain Range, Mongol Daguur, Eastern Mongolian Plain, Middle Khalkh Steppe and oases in the Gobi (Dzungar, Trans-Altai, Northern and Eastern Gobi) (Tugarinov, 1916; Kozlova, 1930&1932; Tugarinov, 1932; Sushkin, 1938; Dementiev, 1951; Tarasov, 1960; Bold, 1973; Mauersberger, 1980; Piechocki *et al.*, 1981; Rogacheva *et al.*, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 4,800,000 - 8,900,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migrants arrive in breeding sites by late April-early May. Breeding season continues from May-July. They nest in colonies, near lakes, marshes, old riverbeds, densely vegetated areas near lakes, sometimes near reed beds in valleys and regions of lakes (Sumiya & Skryabin, 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow scrape, an accumulation of live and dead plant matter. The nest is built by both sexes. The female usually lays 3, sometimes 2, occasionally up to 6 eggs of slightly glossy, light olive, greenish, buffish, whitish –blue to deep brownish-buff or brown colour with black, dark brown, olive brown, or olive spots, blotches, scrawls and markings. The parents incubate the eggs for 1-27 days. Both adults brood and care for the young. The broods can fly at c. 5-6 weeks. It feeds on aquatic and terrestrial invertebrates like insects and their larvae, small fish and young voles. On migration, it forms small to large flocks consisting of 5-100 individuals feeding on open muddy and stony shores of saline and freshwater lakes, islands, river banks, shallow water edges of pools and marshes. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on breeding success, food and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.); 12. Artificial – Aquatic (12.6., 12.9. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /two hydroelectric dams -the Dörgön and the Taishir made significant changes

like drought of lakes and channel /; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./ -4.1.1.5. Poisoning / use of rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon and Eurasian Hobby/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

200. Scientific Name: *Larus genei*

Species Authority: Breme, 1840

Common Names: Slender-billed Gull (English), Shövgör tsakhlai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Antigua and Barbuda, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Mali, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, France, Nigeria, Germany, Switzerland, Italy, Tunisia, Libyan Arab Jamahiriya, Austria, Slovenia, Poland, Malta, South Africa, Montenegro, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Sudan, Ukraine, Bulgaria, Egypt, Turkey, Russian Federation, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Djibouti, Yemen, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Thailand, Hong Kong, Japan.

Regional Distribution: M.Stubbe, K.Uhlenhaut (Halle-Wittenberg University, Germany) and D.Sumiya (NUM & MOS) collected one bird near Uvs Lake of Uvs province on 19 June, 1977 (Heidecke *et al.*, 1992; Dawaa *et al.*, 1994; Bold & Mainjargal, 2006). It is a rare migrant at Uvs Lake in the Uvs Lake Depression (Bugrovsky, 1990; Archimaeve-Ozerskaya & Zabelin, 2010)

Population: The global population consists of 310,000 - 380,000 mature individuals. Global breeding and resident ranges are estimated at 3,120,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species was only recorded at Uvs Lake. It migrates through NW Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). According to del Hoyo *et al.* (1996), they feed on aquatic and terrestrial invertebrates like insects and their larvae, crustaceans, small fish, young voles and carrion.

Habitat Type: Potential habitats are 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/-1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water / human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/-1.4.6. Dams /two hydroelectric dams -the Dörgön and the Taishir made significant changes like drought of lakes and channel /; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates across some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

201. Scientific Name: *Larus relictus*

Species Authority: Lönnerberg, 1931

Common Names: Relict Gull (English), Ryelikt tsakhilai (Mongolian)

Global Status: Vulnerable, C2a(ii)

Regional Status: Endangered, C1

Rationale for Assessment: This species has been assessed as Endangered, C1 because there are estimated to be less than 300-400 mature individuals in Mongolia and the population is estimated to have undergone a decline of at least 20% in the last five years. The continuing decline in this species' population is primarily due to drought causing a loss of wetland habitat in eastern Mongolia. Human disturbance and overgrazing also threaten this species' survival. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009- Endangered, C1

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Bulgaria, Russian Federation, Kazakhstan, Republic of Korea, Kyrgyzstan, China, Mongolia, Viet Nam, Hong Kong, Japan.

Regional Distribution: This species has been recorded from many localities in Western, Central and Eastern Mongolia, with breeding records from two sites and evidence for breeding at several more (BirdLife International, 2001). This species is dependent on transient and unpredictable water conditions and a large proportion of the adults probably fail to find suitable areas for breeding (Duff *et al.*, 1991). Many records presumably involve non-breeding adults wandering from site to site during the early summer (BirdLife International, 2001). This species nests in colonies, on islands of flat open salt- or freshwater lakes (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) such as Khar-Us Lake (two nests found on an island of Tsagaan Lake 24 June, 1999) (Bold & Tseveenmayadag, 2005), Taatsiin Tsagaan Lake (3 birds in May 1977, minimum 8 pairs nested in 1981, 14 nests counted in 1982) (Kitson, 1980; Fisher 1985; Scott 1989; Duff *et al.*, 1991; Bold & Tseveenmayadag, 2005);

Lag Lake (14 adults, including 3 adults with chicks in June, 1999) (BirdLife International, 2001); Orog Lake (20 pairs in April-May, 1977) (Kitson, 1980; Duff *et al.*, 1991), (two in 1987) (Scott 1989); (2 adults and a juvenile in September, 1999) (BirdLife International, 2001; Bräunlich, 1999). This species used to breed in Höh Lake (Bold & Tseveenmayadag, 2005) and Tari or Tooroi Lake (Ulz River valley of eastern Mongolia). This species may breed in Ihes Lake (Gobi-Altai), Bööntsagaan Lake (Valley of the Lakes) (Bold & Tseveenmayadag, 2005), Bus, Galuut and Khaichiin Tsagaan Lakes (Ulz River valley) (Bold & Tseveenmayadag, 2005). It migrates through the breeding areas, Khyargas Lake (60 adults in July, 1969; breeding suspected but not confirmed) (Duff *et al.*, 1991); Airag Lake (47 adults in June, 1995, two records of single adults in June, 1996) (Bräunlich, 1995); Khar-Uus (two migrants seen on the northern slopes of the mountain massif, undated) (Duff *et al.*, 1991); Khar, and Dörgön Lakes (Great Lakes Depression); Ihes Lake (adult collected in June, 1957) (Piechocki *et al.*, 1981; Duff *et al.*, 1991; Bold 1997); Bööntsagaan Lake (12 adults in June, 1989) (Duff *et al.*, 1991); (three adults in July, 1998) (Dubois & Moutou, 1998), (nine on the south-east side of the lake, June, 2000) (Bräunlich, 2000; BirdLife International, 2001), (52 birds in 2003) (Bold, 2005); (6 individuals on 6 June, 1999) (Bold & Tseveenmayadag, 2005), (52 birds on 8 June, 2003) (Bold & Tseveenmayadag, 2005); Adgiin Tsagaan Lake (Valley of the Lakes); Sangiin Dalai, and Ögii Lakes (2 adults and 4 immature birds on 7 August, 2007) (S.Gombobaatar pers. comm. and photographs), Terhiin Tsagaan Lakes (Khangai Mountain Range); Hur Lake in Töv province (more than one recorded in August, 1970) (Il'ichyev & Zubakin, 1988; Duff *et al.*, 1991); Talyn Tavag lake (Onon River valley of Dadal sum in Hentii province) (Badley *et al.*, 2005); Sumiin Tsagaan, Höh, Döröö and Galuut Lakes (adult in June, 1998) (Bräunlich, 2000; BirdLife International, 2001), Bus Lake (5 adults in June, 1998) (Bräunlich, 2000; BirdLife International, 2001), (collected a breeding female 15 May, 1991) (Bold & Tseveenmayadag, 2005); Angirt Lake (5 birds on 16 June, 1987) (Bold & Tseveenmayadag, 2005); Khaichiin Tsagaan Lake (seven adults in June, 1998) (Bräunlich, 2000; BirdLife International, 2001), (adult in May 1999), (45 birds on 24 June, 2003) (Bold & Tseveenmayadag, 2005); Shorvog lake (Bräunlich, 2000; BirdLife International, 2001), Höh Lake of Dornod province (3 adults in July, 1977) (Kitson, 1980; Duff *et al.*, 1991; Bold, 1997), and (4 individuals 18 June, 1987) (Bold & Tseveenmayadag, 2005); Tsaidam Lake of Dornod province (four adults in May, 1999) (Bräunlich, 2000; BirdLife International, 2001); Khoriiin Tsagaan Lake of Dornod province (54 adults in June 1998) (Bräunlich, 2000; BirdLife International, 2001), Chukh Lake of Dornod province, undated (Piechocki, 1983); a small unnamed lake NW Choibalsan town (9 individuals on 17-19 May, 1999) (Bold & Tseveenmayadag, 2005); small unnamed lake near Choibalsan town (two adults in May 1999) (Bräunlich, 2000; BirdLife International, 2001) (Eastern Mongolia), Buir, Bayan Lakes, and a small lake S of Buir Lake of Dornod province (an adult collected in May 1966) (Buir Lake-Khalkh River-Khyangan region) (Stubbe & Bold, 1971; Piechocki 1983; Scott 1989; Duff *et al.*, 1991); Bulgan River (adult in May, 1975) (Piechocki *et al.*, 1981; Piechocki, 1983; Duff *et al.*, 1991) and steppe saline lakes (Trans-Altai, Alashani, and N, W&E Gobi) (Tugarinov, 1916; Stubbe & Bold, 1971; Polyakov, 1912 *et al.*, 1982; Stephan, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya *et al.*, 2000; Tseveenmyadag *et al.*, 2000; BirdLife International, 2001; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Bold & Tseveenmyadag, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009). Migrating birds were found at Angirt Lake of Dornod province on 15 July, 1979 (Bold & Tseveenmyadag, 2005), Ögii Lake (Tsegmid & Uuganbayar, 2006) and Khomyn tal of Khovd province (Nyambayar & Tseveenmyadag, 2009). A total of 50 breeding pairs nested in Lag Lake in the east in 1999 (MNE & JICA, 2001).

Population: The global population consists of 2,500-9,999 mature individuals. Global breeding and resident ranges are estimated at 1,380,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. They nest in colonies on flat open islands of the fresh water and saline lakes with reed or tall sedges. The nest is built of dry grasses, feathers, and reeds on the ground. Nests are situated only 2-5 meters apart. Breeding ecology of the species has not been well studied in Mongolia. The female usually lays 3, rarely 4 or 5 eggs of pale greenish or pale olive-greenish colour with dark brown and reddish-brown blotches, spots and markings. Both birds in-

incubate the eggs for 24-26 days (MNE & JICA, 2001) and care for the young. Both adults and young feed on aquatic invertebrates including, insects, crustaceans, molluscs, and small fish. After breeding season, young and adults form flocks consisting of 3-60 individuals, feed and rest on muddy shores, shallow water edges of sand bars, islands of fresh water and saline lakes, wide river banks and sandy beaches of lakes and rivers on migration. They leave their breeding and summering sites for wintering grounds by late August–mid-September (MNE & JICA, 2001).

Habitat Type: 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Livestock gather on islands and shallow water edges of lakes where the species breeds and feeds. The overgrazing of livestock is a cause of habitat degradation associated with drought of the lakes and wetlands.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have directly and indirectly affected the species through water that contaminated by heavy metals like mercury.

1.4. Infrastructure development -1.4.3. Tourism and recreation-1.4.5. Transport water: Ecotourism development, tourist camps and water transport near breeding sites, are major threats to the species.

1.4.6. Dams: Two hydroelectric dams were built within the watershed of the Great Lakes Depression: the Dörgön across the Chono Kharaiikh River and the Taishir at the Zavkhan River. After construction of the dam, the Zavkhan River dried up. The drought has made significant changes to Airag, Zost Lakes and the channel feeding Khyargas Lake (Gilbert *et al.*, 2009; Batmunkh *et al.*, 2010). Due to this drought, reed, wetlands, ponds and lakes dried out. This change threatens to non-breeding birds through loss of habitat and food resources.

4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement: Illegal fishing activities at Buir, Höh, Ögii and Khar Lakes. Abandoned gill nets along the lake shores are a hazard both to local livestock and this species.

4.1.2. Terrestrial-4.1.2.2. Shooting: See 3.5.1.

4.1.2.3. Poisoning, 4.2. Collision -4.2.1. Pylon and building collision: rodenticide, Bromadilone against Brandt's Vole (*Lasiopodomys brandti*) and collision are potential threat to the species.

5. Persecution-5.1. Pest control: See 4.1.2.3.

6. Pollution (affecting habitat and species)-6.3. Water pollution: Domestic water pollution is a potential threat to breeding success of the species, associated with habitat change.

7. Natural disasters-7.1. Drought: Due to the drought of the last few years, their important sites dried out and the birds have been losing their breeding, resting, roosting and refueling habitats.

8. Changes in native species dynamics-8.1. Competitors: Nest competitors are Mongolian Gull, Black-headed Gull and Grey Heron in breeding sites.

8.2. Predators: Carnivores such as Raccoon Dog (*Nyctereutes procynoides*), Grey Wolf (*Canis lupus*), Steppe Eagle and Saker Falcons easily prey upon the flightless and slow-moving chicks. An increase in competitor and predator numbers and a decrease in food base also constitute threats to this species.

8.5. Pathogens or parasites: Highly pathogenic avian influenza is a potential threat to the species in Mongolia.

9. Intrinsic factors-9.2. Poor reproduction-9.5. Low densities-9.9. Restricted range: The intrinsic factors lead the population decrease and low breeding success in Mongolia.

10. Human disturbance-10.4. Transport: Transport by boat and car near tourist camps and local transport have negatively affected individuals as they migrate and feed.

10.5. Fire: See 1.7.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Included in CITES Appendix I. Listed under the Mongolian Hunting Law, 2000. Approximately 13.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

202. Scientific Name: *Larus minutus*

Species Authority: Pallas, 1776

Common Names: Little Gull (English), Khurgan tsakhilai (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Columbia, Puerto Rico, Barbados, Saint Pierre and Miquelon, Bermuda, Iceland, Senegal, Mauritania, Gambia, Guinea-Bissau, Morocco, Sierra Leone, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Angola, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Cyprus, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Islamic Republic of Iran, Kazakhstan, Kuwait, Uzbekistan, India, China, Mongolia, Hong Kong, Japan.

Regional Distribution: This species breeds at Achit Lake (Mongol-Altai Mountain Range) and Hövsgöl Lake (Hövsgöl Mountain Range) (breeding colonies in reed beds breed together with Mongolian Gull and White-winged Terns at delta of Khankh River and also found a small breeding colony at Khoroo River valley) (Sumiya & Skryabin, 1989). It is found at Uvs Lake (Great Lakes Depression), Zavkhan River valley (Zavkhan Desert Steppe Depression), Sangiin Dalai, Ögii, Terhiin Tsagaan, Telmen Lakes (Khangai Mountain Range), Orkhon, Selenge, Kharaa, Yeröö River valleys (Orkhon-Selenge River basins), Tuul, Onon, Herlen, and Ulz River basins (Hentii Mountain Range), Khalkh, Nömrög Rivers and Buir, Shavar, Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region) on migration (Tugarinov, 1932; Stubbe & Bold, 1971; Mauersberger, 1982; Piechocki, 1981; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 97,000 - 270,000 mature individuals. Global breeding and resident ranges are estimated at 8,190,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migrants arrive in breeding and summering sites by late April-early May. Breeding season continues from May-July. They nest in colonies together with terns and other gulls, in lakes with undergrowth, old riverbeds, swampy lowlands and islands (Sumiya & Skryabin, 1989; Gombobaatar, 2012). The nest is an accumulation of dead waterside plants, reeds and sedges on tussocks of grass or rushes in water or marsh, or in shallow water among reeds and in open sites on low sandbanks or island. The female usually lays 3, rarely 2, 4 or 5 eggs of slightly glossy, light olive-green, olive or buff, sometimes very pale greenish colour with black, blackish -brown or olive, and with paler shades of grey specks, spots, and usually small blotches and other markings. Both sexes incubate

the eggs for 20-21 days. The parents brood and care for the young until they fledge. The young can fly at c. 21-24 days. Both adults and young feed on aquatic arthropods, insects and their larvae, crustaceans, molluscs, and small fish (del Hoyo *et al.*, 1996). They take food in flight from the water surface or the ground, sometimes catching insects in mid-air. It forms small flocks consisting of 4-10 individuals, feeding and resting on muddy and stony shores, shallow water edges of saline and freshwater lakes, banks of large rivers, and marshy areas. They leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

203. Scientific Name: *Rhodostethia rosea*

Species Authority: (MacGillivray, 1824)

Common Names: Ross's Gull (English), Huzuuvchit yagaandai or yagaan tsakhilai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Greenland, Iceland, Ireland, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Germany, Italy, Denmark, Svalbard and Jan Mayen, Sweden, Poland, Finland, Russian Federation, China, Mongolia, Japan.

Regional Distribution: One individual was recorded near Uvs Lake of Uvs province in August (Dawaa *et al.*, 1994).

Population: The global population consists of 25,000 - 100,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There is only one accidental record in NW Mongolia. It forages solitarily or in small loose flocks (del Hoyo *et al.*, 1996). The species occurs on open muddy shores of saline lakes and river banks in Mongolia. According to del Hoyo *et al.* (1996), the species is chiefly insectivorous, and its diet consists of beetles (Coleoptera) and dipteran flies. On migration and in the winter, they eat small fishes and invertebrates, including plankton, crustaceans, and molluscs.

Habitat Type: Potential habitats are 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates across some protected areas (Mongol Daguur, Khalkh –Nömrög Strictly Protected Areas) and Important Bird Areas in the eastern part of Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

204. Scientific Name: *Rissa tridactyla*

Species Authority: (Linnaeus, 1758)

Common Names: Black-legged Kittiwake or Kittiwake (English), Gurvankhuruut zakhelai or gurvan khuruut tsakhelai (Mongolian)

Subspecies in Mongolia: *R. t. pollicaris* (see Olson & Larsson (2003) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Belize, Cuba, Islands, Peru, Jamaica, Haiti, Bahamas, Turks and Caicos Islands, Dominican Republic, Virgin Islands, U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Cyprus, Israel, Jordan, Lebanon, Islamic Republic of Iran, Kazakhstan, Oman, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: A single bird was found at Herlen River in Mōngönmorit sum of Töv province in October (Stubbe & Bold, 1971; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2005).

Population: The global population consists of 17,000,000 - 18,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There was only one record in Central Mongolia on autumn migration. They might pass through the country the same as other migratory birds by late April-early May (on spring migration) and late August-early October (on autumn migration), depending food and weather conditions. The species occurs on muddy and stony shores, sandy beaches of saline and freshwater lakes, sand bars and shallow water edges of lakes and rivers. According to del Hoyo *et al.* (1996), its diet consists predominantly of invertebrates and fishes, although during the breeding season it may also take earthworms, crustaceans, molluscs, small mammals and plant matter.

Habitat Type: Potential habitats are 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. Bycatch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates across some protected areas (Mongol Daguur, Khalkh -Nömrög Strictly Protected Areas) and Important Bird Areas in the eastern part of Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

205. Scientific Name: *Sterna nilotica*

Species Authority: Gmelin, 1789

Common Names: Gull-billed Tern (English), Bakhim kharaalai or bakhim amuulai (Mongolian)

Subspecies in Mongolia: *G. n. nilotica* (see Howard & Moore (1994) and Olsen and Larsson (1995) for further details)

Synonyms: *Gelochelidon nilotica* Gmelin, 1789

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Haiti, Bahamas, Brazil, Argentina, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Zambia, Ukraine, Bulgaria, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Cambodia, Singapore, Brunei Darussalam, Australia, Taiwan, Philippines, Republic of Korea, Japan, New Zealand. It is a regionally extinct vagrant in Portugal.

Regional Distribution: This species breeds at Uvs, Khar-Uvs, Khar, and Dörgön Lakes (Great Lakes Depression) and Höh Lake, Ulz River valley, Dornod province. It migrates through Buyant, Khovd Rivers and Tolbo, Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs, Khar-Uvs, Khar, Dörgön, Khyargas, and Airag Lakes, and the delta of Khovd River (Great Lakes Depression); Orkhon River and Sangiin Dalai, Ögii, Terhiin Tsagaan, Telmen, and Khar Lakes (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); lower Orkhon, Selenge, Kharaa Rivers (Orkhon-Selenge River basins) (Hentii Mountain Range); Bööntsagaan, Ulaan, Orog, Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River (Baruunkhurai Depression). It is found in oases in the Gobi (Trans-Altai) and small steppe lakes in Northern and Eastern Gobi (Kozlova, 1930; Fisher, 1970; Stephan, 1978; Piechocki, 1981; Smerinskii & Sumiya, 1991; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 150,000 - 420,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most migrants arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. They nest in colonies, on sandy islands, shallow lakes, to bare sand shores of saline soil in lake valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow hollow in soft sand or soil, usually sparsely lined with grasses nearby. The female usually lays 3, rarely 2-5 eggs of a non-glossy, or very slightly glossy, pale creamy-buff to pale yellowish colour with dark brown, dark olive- brown spots, specks and blotches, usually small. Parents incubate their eggs for 22-23 days. Both adults brood, care for and feed the chicks. They can fly well at c.5 weeks. Both adults and chicks are insectivorous, taking adult and larval terrestrial and aquatic insects such as Ephemeroptera, Odonata, and Coleoptera, as well as spiders, earthworms, small fish and other aquatic invertebrates. After the breeding period, they form flocks consisting of 3-8 individuals in Mongolia, feeding and resting with Common Terns and White-winged Terns on muddy shores, sand bars, mudflats, marshes, large rivers, lakes and ponds. They leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 4. Grassland (4.4. on migration), 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.8., 5.13.-5.17.); 12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal

and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the east, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Harriers, Saker Falcon and Steppe Eagle prey on both adults and chicks/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

206. Scientific Name: *Sterna caspia*

Species Authority: Pallas, 1770

Common Names: Caspian Tern (English), Morin kharaalai or morin shunguulai (Mongolian)

Subspecies in Mongolia: *H. c. caspia* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Hydroprogne caspia* (Pallas, 1770)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence in eastern and western Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, Mexico, Guatemala, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Ecuador, Jamaica, Columbia, Haiti, Bahamas, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S. Trinidad and Tobago, Dominica, Martinique, Barbados, Saint Pierre and Miquelon, French Guiana, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Syrian Arab Republic, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Nigeria, Netherlands, Luxembourg, Germany, Switzerland, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Equatorial Guinea, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Chad, Poland, Malta, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Bulgaria, Estonia, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Uganda, Mozambique, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Islamic Republic of Iran, Kazakhstan, Kuwait, Qatar, Oman, Turkmenistan, Seychelles, Afghanistan, Pakistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar,

Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Japan, New Zealand.

Regional Distribution: This species breeds at Tolbo, Achit and Uureg Lakes (Mongol-Altai Mountain Range), Khar-Us, Khar Lakes (Great Lakes Depression), Höh Lake in Uz river (Mongol Daguur Steppe), Bööntsagaan, Orog Lakes (Valley of the Lakes). It migrates through the breeding areas and Uvs Lake and the delta of Tes Nariin, Torkholig Rivers; Khar, Dörgön, Khyargas, Airag Lakes and the delta of Khovd River (Great Lakes Depression); lower Orkhon, Selenge Rivers (Orkhon-Selenge River basins); Tuul, Onon, and Balj Rivers (Hentii Mountain Range); Herlen River (Middle Khalkh Steppe), lower Ulz River (Mongol Daguur Steppe); Eastern Mongolian Plain; Khalkh, Nömrög, Azarga Rivers and Buir, Shavar, Tashgain Tavan, and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bulgan River (Baruunkhurai Depression) (Sushkin, 1938; Fisher, 1970; Stepanyan & Bold, 1985; Potapov 1986; Fomin & Bold, 1991; Zabelin, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 240,000 - 420,000 mature individuals. Global breeding and resident ranges are estimated at 6,290,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor. Most breeding birds arrive in breeding sites by late April-early May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from May-July. They nest in colonies, on sandy or stony beaches with sparse vegetation, and islands in lakes and large rivers (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a shallow hollow, unlined, or with a sparse collection of nearby plants debris on bare ground. The female usually lays 2-3, rarely 1 eggs of a non-glossy, or very slightly glossy, pale creamy to cream-buff colour with black, olive, brown and pale grey specks, spots and blotches. Both adults incubate the eggs for 20-22 days and care for the young. After a few days young leave nest and hide in nearby cover. They can fly at 25-30 days. After the breeding season, they form small flocks consisting of 3-6 individuals, and feed and rest on muddy and stony shores, river banks, sand bars and islands of large rivers and lakes with Common Tern and Common Black-Headed Gulls in Mongolia. They feed on earthworms, aquatic invertebrates, flying insects and fishes. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration), 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.8., 5.13.-5.17.); 12. Artificial - Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Harriers, Saker Falcon and Steppe Eagle prey on both adults and chicks/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

207. Scientific Name: *Sterna hirundo*

Species Authority: Linnaeus, 1758

Common Names: Common Tern (English), Egel kharaalai or kharaalai (Mongolian)

Subspecies in Mongolia: *S. h. hirundo*, *S. h. longipennis* (see Baker (1993) and Olsen and Larsson (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Columbia, Chile, Haiti, Venezuela, Turks and Caicos Islands, Dominican Republic, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Saint Kitts and Nevis, Montserrat, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Saint Pierre and Miquelon, French Guiana, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, France, Togo, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Italy, Tunisia, Denmark, Cameroon, Gabon, Equatorial Guinea, Congo, the Democratic Republic of the Congo, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Romania, the Former Yugoslav Republic of Macedonia, Finland, Lithuania, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Moldova, Russian Federation, Tanzania, Mozambique, Cyprus, Kenya, Israel, Saudi Arabia, Jordan, Eritrea, Iraq, Somalia, Djibouti, Yemen, Comoros, Madagascar, Islamic Republic of Iran, Kazakhstan, Qatar, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Myanmar, Cocos (Keeling) Islands, Indonesia, Thailand, Malaysia, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Vanuatu, Fiji, Cook Islands.

Regional Distribution: This species breeds at Buyant, Khovd Rivers and Khoton, Khorgon, Tolbo, Dayan, Achit and Uureg Lakes (Mongol-Altai Mountain Range); Uvs, Khar-Uvs, and Khar Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui River (Zavkhan Desert Steppe Depression); Tamir, Khanui and upper Orkhon Rivers, and Sangiin Dalai, Ögii Lakes, Tui and Baidrag Rivers (Southern Khangai Plateau); Terhiin Tsagaan, Telmen, Khar Lakes with wide shores and valleys and Ider and Chuluut Rivers (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Onon, Balj, upper Herlen Rivers (Hentii Mountain Range); Ulz, Herlen and other rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; lakes in Eastern Mongolian Plain; Khalkh, Degee, Nömrög, Tsagaan chuluut, Azarga, Galdastai Rivers and Buir, Shavar, Tashgain Tavan, and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan River (Baruunkhurai Depression). Its migration route cover the breeding areas and small steppe lakes including temporary

lakes and oases in the Gobi (Trans-Altai, Northern and Eastern Gobi) (Kozlova, 1930 & 1932; Tugarinov, 1932; Sushkin, 1938; Tarasov, 1960; Eregdendagva, 1960; Fischer, 1970; Kleinstäuber & Succow, 1978; Ostapenko *et al.*, 1978 & 1980; Sumiya & Skryabin, 1989; Piechocki *et al.*, 1981; Erdenebat, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 1,600,000 - 4,600,000 mature individuals. Global breeding and resident ranges are estimated at 29,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. They arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. It nests on sandy beaches, on islands in rivers and lakes, boggy meadows and the river deltas with reeds in lake and river valleys (Sumiya & Skryabin, 1989; Sumiya, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They breed in colonies. The nest is a hollow, unlined or variably lined with nearby plants on the ground. The female builds the nest and lays usually 2-3, rarely 4 eggs of a non-glossy, creamy, or pale yellowish, greenish or olive colour with black, dark brown, dark to olive brown blotches, spots, specks and markings. Parents incubate the eggs for 20-23 days. Hatchlings leave the nest 3 days after hatching, but both parents return for brooding and feeding. They can swim at an early age and begin to fly at c.28 days. On migration, breeding and summering birds form flocks consisting of 4-50 individuals, resting and feeding on lake shores, river banks, islands of rivers and lakes, fresh water rivers' sand bars and stony shores, flooded areas, and beaches in Mongolia. This species is opportunistic and feeds predominantly on small fish and occasionally planktonic crustaceans and insects. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration), 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.8., 5.13.-5.17.); 12. Artificial - Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Harriers, Saker Falcon and Steppe Eagle prey on both adults and chicks/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes
Family: Laridae

208. Scientific Name: *Sterna paradisaea*

Species Authority: Pontoppidan, 1763

Common Names: Arctic Tern (English), Umardyn kharaalai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Costa Rica, Cuba, Peru, Ecuador, Columbia, Chile, Brazil, Argentina, Bolivia, Puerto Rico, Virgin Islands U.S, Paraguay, Falkland Islands (Malvinas), Uruguay, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Poland, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Antarctica, Greece, Finland, Latvia, Lithuania, Sudan, Ukraine, Estonia, Belarus, Egypt, Turkey, Lesotho, Russian Federation, Mozambique, Cyprus, Israel, Jordan, Somalia, Oman, India, French Southern Territories, British Indian Ocean Territory, Mongolia, Indonesia, Australia, Japan, Marshall Islands, New Zealand.

Regional Distribution: H.-G. Folz saw a single bird at Ögii Lake of Övörkhangaï province on 5 June, 2000 (A.Bräunlich pers. comm.) and a second individual at Buur River of Selenge River basin, undated (Tsevenmyadag & Bold, 2006).

Population: The global population consists of 2,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant species. There are only two sighting records within the country. It passes through Mongolia same as other migrants by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on weather conditions. The species occurs on lake shores, river banks and islands of saline and freshwater lakes on migration. According to del Hoyo *et al.* (2006), its diet consists predominantly of fish as well as crustaceans (especially planktonic species), molluscs, insects (e.g. caterpillars, Chironomids) and earthworms.

Habitat Type: Potential habitats are 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.9., 5.13.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/; 4. Accidental mortality-4.1. Bycatch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates across some protected areas (Mongol Daguur and Khalkh –Nömrög Strictly Protected Areas) and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

209. Scientific Name: *Sterna albifrons*

Species Authority: Pallas, 1764

Common Names: Little Tern (English), Khurgan kharaalai (Mongolian)

Subspecies in Mongolia: *S. a. albifrons* (see Baker (1993); Howard & Moore (1994); Olsen and Larsson (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence in eastern and western Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Mexico, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Burundi, Tanzania, Mozambique, Cyprus, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Philippines, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Micronesia, Solomon Islands, New Caledonia, Marshall Islands, New Zealand, Samoa, Kiribati.

Regional Distribution: This species breeds at Khar-Us, Khar Lakes (Great Lakes Depression), Khalkh River and Buir Lake (Buir Lake-Khalkh River-Khyangan region), Bööntsagaan and Orog Lakes (Valley of the Lakes). It migrates through Uvs, Khar-Us, Khar, Dörgön, Khyargas, and Airag Lakes and the delta of Khovd River (Great Lakes Depression); Sangiin Dalai, Ögii, and Terhiin Tsagaan Lakes (Khangai Mountain Range); Hentii Mountain Range; Bulgan River (Baruunkhurai Depression) (Tugarinov, 1916&1932; Kozlova, 1930; Sushkin, 1938; Fisher, 1970; Stubbe & Bold, 1971; Piechocki, 1987; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 190,000 - 410,000 mature individuals. Global breeding and resident ranges are estimated at 11,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and summering birds arrive in the country by late April-early May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from May-July. It nests in small colonies or in pairs on sandy and pebbly beaches, islands and shores of rivers and lakes with fishes (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a shallow hollow, usually unlined, or sparsely lined with nearby plants. The female usually lays 2-3 eggs of a non-glossy, pale, tinted olive or buff, or creamy colour with brown or dark grey spots, blotches and speckles. Parents incubate the eggs for 19-22 days. Both adults care for and feed the young. They can leave nest after a day but remain nearby. The young can fly at 15-17 days. On migration, they form flocks consisting of 3-30 individuals, feed and rest on sandy and stony lake shores, sand bars, river banks and large creeks. It feeds predominantly on small fish, crustaceans, insects, annelid worms and molluscs. They leave their breeding site for wintering grounds by late August-early September, depending on food and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration), 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.8., 5.13.-5.17.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Harriers, Saker Falcon and Steppe Eagle prey on both adults and chicks/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 17.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

210. Scientific Name: *Chlidonias hybrida*

Species Authority: (Pallas, 1811)

Common Names: Whiskered Tern (English), Tsagaanshanaat kharaalzai or tsagaan shanaa kharaalai (Mongolian)

Subspecies in Mongolia: *C. h. hybridus* (see Howard & Moore (1994) and Olsen and Larsson (1995) for further details)

Synonyms: *Chlidonias hybridus* Pallas, 1811

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Barbados, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Chad, Poland, Malta, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Egypt, Zimbabwe, Turkey, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Republic of Korea, Japan, Papua New Guinea, Micronesia, New Zealand.

Regional Distribution: This species breeds at Uvs, Khar-Uvs, and Khar Lakes (Great Lakes Depression) and Bööntsagaan and Taatsyn Tsagaan Lakes (Valley of the Lakes). It migrates through Uvs, Khar-Uvs, Khar, Dörgön, Khyargas, and Airag Lakes (Great Lakes Depression); Zavkhan Desert Steppe Depression; Sangiin Dalai, Ögii, Terhiin Tsagaan, and Telmen Lakes (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); lower Orkhon, Selenge River valleys (Orkhon-Selenge River basins); Ulz, Herlen and other rivers, and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; lakes in the Eastern Mongolian Plain; Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes); and steppe lakes in N Eastern Gobi (Fisher, 1970; Stubbe & Bold, 1971; Mauersberger *et al.*, 1982; Stephan, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 300,000 - 1,500,000 mature individuals. Global breeding and resident ranges are estimated at 10,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in breeding sites by late April-early May. Breeding season continues from May-July. They nest in colonies on islands, marshes and shores of rivers and lakes with reed beds and tall sedges (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is an accumulation of reeds and sedges and other plants on the ground or floating, less solid than Black Tern, and central hollow without definite lining. The female usually lays 3, sometimes 2-4 eggs of slightly glossy, pale bluish-green, pale blue, pale olive-buff colour with blackish-brown and pale grey spots, blotches and markings. Both sexes (mainly by female) incubate the eggs. The parents brood the chicks and feed them. They feed on terrestrial and aquatic insects such as adult and larval Odonata, Orthoptera, flying ants, mosquitoes, spiders, young amphibians, and small fish. On migration, they form flocks consisting of 3-15 individuals in Mongolia, feed and rest on shores, river banks, marshes with tussocks and bare ground, sandbars, islands, and pools with reed beds. They hunt and rest with White-winged Tern and Black Terns, leaving the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration), 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.8., 5.13.-5.17.); 12. Artificial - Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from

mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Harriers, Saker Falcon and Steppe Eagle prey on both adults and chicks/, 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

211. Scientific Name: *Chlidonias leucopterus*

Species Authority: (Temminck, 1815)

Common Names: White-winged Tern or White-winged Black Tern (English), Buural kharaalzai or Buural kharaalai (Mongolian)

Subspecies in Mongolia: *C. l. leucopterus* (see Dawaa *et al.* (1994) and Olsen and Larsson (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Bahamas, Turks and Caicos Islands, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti,

Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, United Arab Emirates, Oman, Turkmenistan, Réunion, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Cocos (Keeling) Islands, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Singapore, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Guam, Northern Mariana Islands, Solomon Islands, New Zealand. It is regionally extinct in the Former Yugoslav Republic of Macedonia.

Regional Distribution: This species nests in colonies, on shores of freshwater lakes and rivers with reeds and hummocks in lake valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) such as Achit Lake (Mongol-Altai Mountain Range); Khar-Uus, Khar Lakes (Great Lakes Depression); western Uvs Lake (Northern Uvs Depression); Ögii Lake (Khangai Mountain Range); Northern Hövsgöl Lake (Hövsgöl Mountain Range); lower Tuul River, upper Onon Rivers (Hentii Mountain Range); Ulz, Herlen, other rivers and lakes in Mongol Daguur; Khalkh River and Buir, Tashgain Tavan, Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog Lakes (Valley of the Lakes). It migrates through the breeding grounds and valleys of Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression), upper Orkhon River and Sangiin Dalai, Ögii, Terhiin Tsagaan, Telmen, and Khar Lakes (Khangai Mountain Range), Shishgid, Dood Lake wetlands (Darkhad Depression), lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins), Eastern Mongolian Plain, Taatsyn Tsagaan Lake (Valley of the Lakes), small lakes and oases in the Gobi (Trans-Altai, Northern, and W Eastern Gobi) (Kozlova, 1930; Tugarinov, 1932; Sushkin, 1938; Fisher, 1970; Skryabin & Sumiya, 1976; Mauersberger *et al.*, 1982; Skryabin, 1982; Piechocki *et al.*, 1987; Stephan, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Bolortsetseg, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Archimaeve-Ozerskaya & Zabelin, 2010).

Population: The global population consists of 2,500,000 - 4,500,000 mature individuals. Global breeding and resident ranges are estimated at 6,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia, arriving at breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs breed in colonies on shallow waters, or in marshes, in similar sites to Black Tern and at times in company with them. The nest is an accumulation of waterweed and other plants floating in shallow water or on a raft of floating aquatic plants. The female usually lays 3, sometimes 2, rarely 4 eggs of slightly glossy, buffish to brown or pale yellowish colour with black and dark brownish spots, blotches and markings. Both sexes incubate the eggs. Chicks leave the nest but remain nearby. Both parents care for and feed chicks in the nest. They eat predominantly aquatic insects such as Diptera, Odonata and Coleoptera, adult and larval terrestrial insects (non-breeding periods), small fishes and young amphibians. After the breeding season, it forms flocks consisting of 4-30 individuals, feeds and rests on muddy and stony shores of saline and freshwater lakes, river banks, edges of marshes, pools, and ponds with tussocks and patchy dry bare ground, on islands, sand bars of lakes and rivers, and flooded grassland. In autumn, they hunt terrestrial insects in dry steppe near wetlands. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration), 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.8., 5.13.-5.17.);

12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1.

Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Laridae

212. Scientific Name: *Chlidonias niger*

Species Authority: (Linnaeus, 1758)

Common Names: Black Tern (English), Hilen kharaalzai or hilen kharaalai (Mongolian)

Subspecies in Mongolia: *C. n. niger* (see Howard & Moore (1994); Olsen and Larsson (1995); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Chlidonias nigra* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence in Northern and eastern Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Rwanda, Tanzania, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Oman, Afghanistan, Tajikistan, India, China, Sri Lanka, Mongolia, Singapore, Australia, Japan.

Regional Distribution: This species breeds at Uvs Lake areas, Sagil, and Höndlön River valleys. It

migrates through Uvs Lake area (breeding area) and valleys of Khar-Us, Khar, Dörgön, Khyargas, and Airag Lakes, and the delta of Khovd River (Great Lakes Depression); Hövsgöl Lake and Delgermörön, and Eg Rivers (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); lower Orkhon, Selenge Rivers (Orkhon-Selenge River basins); upper Tuul, Onon, Balj Rivers (Hentii Mountain Range); Ulz, Herlen, other rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; Khalkh, Degee, Nömrög Rivers, and Buir, Shavar, Tashgain Tavan, and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region). It also occurs on small lakes and oases in the Trans-Altai Gobi, Northern and W Eastern Gobi (Kozlova, 1930; Tarasov, 1960; Stubbe & Bold, 1971; Mauersberger 1980; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 650,000 - 1,800,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It nests in colonies, on shores of islands and rivers with reeds or tall sedges on Uvs Lake areas (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a heap of water plants and reeds, lined with finer plants on the ground in marshy areas with reeds. The female usually lays 3, sometimes 2-4 eggs of slightly glossy, light buffish to brown, or pale yellowish or creamy colour with large black and dark brownish spots, blotches, and markings. Both sexes incubate the eggs for 20-21 days and care broods. The broods leave the nest but remain on/near nest for c. 2 weeks, start to fly at c.3, and fully fledge at c. 4 weeks. They feed predominantly on insects such as chironomids, dragonflies, Ephemeroptera and Coleoptera, small fishes and young amphibians. Migrating and summering birds form flocks consisting of 3-25 individuals, feed and rest on muddy and stony shores, river banks, pools, ponds and swampy marshes. The flocks forage with other terns (White-winged Terns and Whiskered Terns). They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. on migration), 5. Wetlands (5.1., 5.2., 5.4., 5.5.-5.8., 5.13.-5.17.); 12. Artificial – Aquatic (12.2., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation-1.4.5. Transport water /human settlement, mining activities, disturbance from tourist camps and resorts near large lakes and rivers/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought/, 6.3. Water pollution-6.3.2. Domestic /water pollution by chemicals from mining activities and organic pollution by livestock/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.3. Prey and food base /lack of food in refueling and stop-over wetlands due to drought and human activities/, 8.5. Pathogens /highly pathogenic avian influenza/; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Stercorariidae

213. Scientific Name: *Stercorarius pomarinus*

Species Authority: (Temminck, 1815)

Common Names: Pomarine Jaeger or Skua (English), Besreg khailgana or besreg khulgaich tsakhlai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, Belize, Nicaragua, Costa Rica, Cuba, Panama, Peru, Ecuador, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Aruba, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Morocco, Sierra Leone, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Austria, Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Greece, Romania, Finland, Latvia, Bulgaria, Egypt, Turkey, Russian Federation, Tanzania, Kenya, Israel, Saudi Arabia, Lebanon, Eritrea, Somalia, Djibouti, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Pakistan, India, British Indian Ocean Territory, Maldives, China, Sri Lanka, Myanmar, Indonesia, Thailand, Malaysia, Brunei Darussalam, Australia, Hong Kong, Philippines, Republic of Korea, Japan, Solomon Islands, New Caledonia, Vanuatu, New Zealand, Fiji, Kiribati.

Regional Distribution: L.Tsevel and N.Darisuren (Natural History Museum, Mongolia) collected a single bird near Khar Lake of Khovd province (Great Lakes Depression) (Dawaa *et al.*, 1994; Bold & Mainjargal, 2006). M. Gilbert from Wildlife Conservation Centre observed one adult of light morph at Tsagaan Lake of Daschinshilen sum in Bulgan province on 25 - 26 August, 2006 and an unidentified Skua, possibly Pomarine Jaeger at Bööntsagaan Lake of Bayankhongor province (Valley of the Lakes) on 30 September, 2006 (Bräunlich, 2006a).

Population: The global population consists of 250,000 - 3,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant species. The species migrates along western Mongolian lakes by late April-early May (on spring migration) and late August -mid-September (on autumn migration). According to Flint *et al.* (1984), they feed on fishes while gulls and terns take them from lakes and rivers. They also take voles, fledglings of small birds and insects.

Habitat types: Potential habitats are 5. Wetlands (shores and banks of the valleys of 5.1., 5.2., 5.5.-5.8., 5.13., 5.14.-5.17.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development

-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement / see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought /; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Particular conservation measures have not been taken on the species in Mongolia. However, they migrate through protected areas and Important Bird Areas in the country on migration.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Charadriiformes

Family: Stercorariidae

214. Scientific Name: *Stercorarius parasiticus*

Species Authority: (Linnaeus, 1758)

Common Names: Parasitic Jaeger or Arctic Skua (English), Godon khailgana or godon tsakhlai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Aruba, Netherlands Antilles, Virgin Islands U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, France, Ghana, Togo, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Greece, Romania, Finland, Latvia, Sudan, Bulgaria, Egypt, Turkey, Russian Federation, Tanzania, Mozambique, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Lebanon, Syrian Arab Republic, Iraq, Georgia, Somalia, Yemen, Eritrea, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Seychelles, Pakistan, India, Sri Lanka, Bangladesh, Christmas Island, Indonesia, Thailand, Malaysia, Singapore, Australia, Taiwan, Republic of Korea, Japan, Solomon Islands, New Caledonia, Vanuatu, New Zealand, Fiji.

Regional Distribution: A single bird was found at Buur River of Selenge province and Airag Lake in Mongol-Altai region (Dawaa *et al.*, 1994; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2006; Boldbaatar, 2008).

Population: The global population consists of 500,000 - 10,000,000 mature individuals. Global breed-

ing and resident ranges are estimated at 6,280,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species has been recorded twice in N&W Mongolia. They migrate through shores of saline and freshwater lakes and possibly large river banks late April-early May (on spring migration) and late August-early September (on autumn migration). Flint *et al.* (1984) mentioned that this species feeds on fishes which it usually obtains from gulls by harassing them until they regurgitate their recently swallowed food. The name of the species is from this feeding behaviour. They also take voles, fledglings and insects.

Habitat types: Potential habitats are 5. Wetlands (shores and banks of the valleys of 5.1, 5.2, 5.5-5.8, 5.13, 5.14-5.17).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/ -1.3.2. Fisheries-1.3.2.1. Subsistence-1.3.2.2. Artisanal or small-scale-1.3.2.3. Large-scale /illegal and legal fishing activities using gill nets, and abandoned gill nets on shore/, 1.4. Infrastructure development -1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers in the eastern steppe, destroy their habitats/; 4. Accidental mortality-4.1. By-catch-4.1.1. Fisheries-related-4.1.1.3. Entanglement /see 1.3.2.2.-1.3.2.3./, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought /; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./; 10. Human disturbance-10.1. Recreation and tourism /see 1.3.1./, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: There is no particular conservation measure for Mongolia. However, they migrate through protected areas and Important Bird Areas in the country on migration.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Pteroclididae

215. Scientific Name: *Syrrhaptes paradoxus*

Species Authority: (Pallas, 1773)

Common Names: Pallas's Sandgrouse (English), Mongol nogtruu or nogtruu (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species is subject to habitat loss and degradation by livestock, mining, poisoning and overhead power lines, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Ireland; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Serbia; Greece; Romania; Finland; Latvia; Bulgaria; Turkey; Russian Federation; Islamic Republic of Iran, Kazakhstan; Uzbekistan; India; Kyrgyzstan; China; Mongolia; Republic of Korea, Japan.

Regional Distribution: This species breeds at Mongol-Altai and Gobi-Altai Mountain Ranges (except for

high mountain areas and mountain valleys greater than 2,300 m asl), Great Lakes Depression, southern Middle Khalkh Steppe, Valley of the Lakes, Baruunkhurai Depression and Gobi (Trans-Altai, Northern and Eastern Gobi (except for mountains). Single and non-breeding birds occur in Ulz River valley (Mongol Daguur Steppe), Orkhon and Selenge River valleys (Orkhon-Selenge River basins), Erhil Lake Valley (Khangai Mountain Range) during seasonal movements and during the breeding season (Przewalskii, 1876; Potanin, 1883; Pevtsov, 1883; Bianki, 1915; Kozlova, 1930; Bannikov & Skalon, 1948; Kozlov, 1948; Tarasov, 1960; Bold, 1969; Eregdendagva, 1975; Berezovskii, 1881; Smirenskii & Sumiya, 1991; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Nyambayar & Tseveenmyadag, 2009; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Bold & Tulgat, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 7,450,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. Considering the record of one and half million breeding pairs found at N Baruun Tooroi spring in 1985, it is an abundant bird in the country. Several thousand Pallas's Sandgrouse were observed in the valley of Dörgön Lake and Sharga Gobi in July and August in 1975 and 1976; Doloodyn Gobi, Ööshiin Gobi, Galbyn Gobi, and lakes in the Valley of the Lakes and Great Lakes Depression in early autumn of 1978. The size of breeding territory of the species in Mongolian Gobi is 650 km². According to several authors, the population in Mongolia is approximately 3 million, excluding individuals in the Trans Altai Gobi (Bold & Tulgat, 2005).

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder staying all year round. During non-breeding season it is a gregarious species. It nests on open dry pebbly ground with short vegetation in steppe, desert steppe, and Gobi Desert. The nest is a shallow hollow, without nest material or sparsely lined with grasses (Bold *et al.*, 2005; Bold & Tulgat, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs laid their eggs in Gobi (SE Galba Mountain) by the second half of February. R.Tulgat found eggs and very young chicks between Sair Khoshuu and Tooroin bulag of the Great Gobi Strictly Protected Areas on 22 March, 1985 (Bold & Tulgat, 2005). S.Gombobaatar and P.Amartuvshin (NUM & MOS) found 6 nests of the species at sandy soil areas north of Mönkhkhaan sum, Suhbaatar province on 10 June, 2009. These nests contained three eggs each and adult birds were actively incubating the eggs (S.Gombobaatar & P.Amartuvshin pers. comm. and photographs). Therefore it seems that egg laying period differs by regions in the country. Egg laying date of breeding pairs in the Gobi is earlier than northern steppe. The female usually lays 3, sometime 2-4 eggs of a non-glossy, very pale yellow, creamy greyish-green colour with dark brown, grayish brown spots, blotches and markings. Both sexes incubate the eggs for 23-28 days. The density of breeding pairs was fairly high in some areas (Atas Mountain). The total area of the breeding pairs nesting at Atas Mountain was 150 km². The distance between nests was 3-4 meters. Nest failure in this area was 50%. Considering these data, Bold & Tulgat (2005) estimated that total nests in the area were 0.75 million. They calculated that the total number of breeding birds at this site alone was 3-4 million. In this area, active nests of the species were continually found at more than 15 km transects. After feathers are dry, chicks leave nest and follow the parents. By beginning of October young birds reach the same weight as adults. In winter, young and adults together form large flocks consisting of 50-1,000 individuals and move to areas with thin snow cover and rich seeds of plants like *Agriophyllum gobicum*. They feed on seeds and green leaves of *Astragalus*, *Artemisia*, *Salsola*, *Melilotus*, *Carex*, *Caragana*, *Chenopodium*, *Echinopsilon davaricatum*, *Halogen glomeratus*, and *Harachnoideus* and flowers. Adult birds also pick seeds of plants; *Agriophyllum gobicum*, *Alhagi adans*, *Nitraria*, *Stipa*, *Corispermum*, *Ceratocarpus*, *Eurotia*, *Lasiogrostis*, *Ephedra*, *Haloxylon ammodendron*, *Tamarix*, *Amygdalus*, *Ulmus*, and *Gramineae*. Chicks like to eat invertebrates such as insects, molluscs, and other arthropods. In winter this species' diet consists predominantly of *Agriophyllum gobicum*. In the morning and evening, they fly to water points 50-60 km distant from the feeding site to drink. Parents bring drinking water in their crop for their chicks (Bold & Tulgat, 2005). Kozlova (1930) observed flocks of 10-15 individuals flying from southeast to northwest at 3-5 minute intervals for a whole day at Ongi River on 4 March, 1930. Birds migrate in large flocks consisting of 200-400 individuals from Khalkh River to Buir Lake passing Russian border. All migrations and movements were associated with

food and snow cover (Bold & Tulgat, 2005). We observed 11,600 individuals, grouped by 10-600 individuals, moving to the northwest of Darkhan sum of Hentii province at 10:00-14:00 on 27 September, 2009 (S.Gombobaatar pers. comm.). Occasional mass migrations are observed in the country in autumn when food supply is limited in certain areas.

Habitat Type: 4. Grassland (4.4); 8. Desert (8.1.-8.3.).

Dominant Threats: 1.1.4. Livestock-1.1.4.1. Nomadic: Overgrazing of livestock in dry steppe where the species breeds and feeds is a cause of habitat degradation associated with desertification.

1.3. Extraction-1.3.1. Mining: Gold and other mining including coal, and others have directly and indirectly affected breeding success of the species.

1.4. Infrastructure development-1.4.2. Human settlement-1.4.4. Transport-land: Developments of human settlement, infrastructure construction, heavy machinery and railroad already built and planned are major threats to the species.

1.7. Fires: Steppe fires burn not only breeding and feeding habitat but possibly nests containing eggs.

3. Harvesting (hunting or gathering)- 3.1. Food-3.1.1 Subsistence use or local trade: Hunting for local trade and for the medicinal value of the bird. This is one of the important game birds in the country. From 1934-1989, the Mongolian government legally hunted and exported hunted birds overseas. Pallas's Sandgrouse made up a third of the hunted birds in Mongolia during this period. Average number of birds hunted annually was 24000 from Ömnögobi province, 9000 from Gobi-Altai, 8000 from province was Bayankhongor and 7000 from Dornogobi in those years (Bold & Tulgat, 2005).

3.2. Medicine- 3.2.1. Subsistence use or local trade: Buddhist monks and traditional medicine doctors use its meat for medicine.

3.5. Cultural, scientific or leisure activities-3.5.3. Regional or international trade: Recently, Arabian falcon trappers in Mongolia have been using the species as bait animal for catching wild Sakers. They attach a noose made of fishing line on its back and release upon sighting Saker Falcons. The Sakers grab the Sandgrouse with loops and entangle with it on air and the ground.

4. Accidental mortality-4.1. By-catch-4.1.2. Terrestrial-4.1.2.1. Trapping, or netting: See 3.5.3.

4.2. Collision-4.2.1. Pylon and building collision: Mortalities through shooting, poisoning, and collision with pylons and vehicles. According to Bold & Tulgat (2005), collision is one of the main threats to the species. Gombobaatar and Amartuvshin (2009), Gombobaatar *et al.* (2011), record 165 collided birds found underneath the power line with 283 km length in southern (Delgertsogt and Adaatsag sums of Dundgobi province) and southeastern Mongolia (Uulbayan and Mönkhkhaan sums of Sukhbaatar province) in 2007 and 2009. According to field observation, 12,000 birds passed through power line areas in one day. Most of the birds during the study period collided during the unusual seasonal migration that occurred in autumn of 2009 (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010).

6. Pollution (affecting habitat and species)- 6.1.1. Global warming: Apparently due to the warming, many suitable breeding habitats have been drying out in the South.

6.2. Land pollution-6.2.2. Domestic-6.2.3. Commercial/Industrial: Due to construction of human settlement and other infrastructure, breeding and feeding areas contain trash like plastic bags, metal machine parts and others. These constitute threats to the species.

7. Natural disasters- 7.1. Drought: Due to the drought of the last few years, important breeding and feeding sites have been drying out and the birds have been losing their breeding, resting and refueling habitats in Mongolia.

7.2. Storms or flooding-7.3. Temperature extremes: Natural disasters including drought, and temperature extremes. According to Bold & Tulgat (2005), many young chicks died from cold and storms in spring, and clutches were deserted due to dense nesting and cold in the Gobi. One fourth of all laid eggs at Sair and Tooroin bulag in Trans-Altai Gobi were overcooled on 23 March (Bold & Tulgat, 2005).

8. Changes in native species dynamics- 8.2. Predators: Saker Falcons hunt Pallas's Sandgrouse all year round in the country (Bold & Tulgat, 2005). Long term diet analysis of the Saker Falcon in Mongolia from 1998 to 2006 showed that Pallas's Sandgrouse constituted 1.0% of the bird species in the Saker Falcon

diet (Gombobaatar, 2006). Northern Ravens, Red Fox (*Vulpes vulpes*) and Corsac Fox (*Vulpes corsac*), Manul Cat (*Otoclobus manul*), Eurasian Eagle-owl prey upon Pallas's Sandgrouse while they drink water in the Gobi Desert (Bold & Tulgat, 2005).

8.3. Prey or food base: A sharp decline of the species between 1981-1982 was caused by lack of main food of the species such as *Echinopsilon davaricatum*, *Halogen glomeratus* and *H.arachnoideus* (Bold & Tulgat, 2005).

8.5. Pathogens or parasites: Pathogens and parasites, an increase in predator and competitor numbers and a decrease in food base also constitute threats to this species. Experts from State Veterinary Laboratory and MAS checked more than 1500 dead birds near power line in the Gobi Desert. They could not find a sign of the collision; the cause might be disease.

10. Human disturbance-10.1. Recreation and tourism: Anthropogenic activities besides tourism development that pose a threat to this species' breeding areas include mining and human populated sites.

10.4. Transport: Transport of cars and horse near breeding areas have been negatively affecting the breeding and non-breeding individuals. While local people and researchers travel through the breeding areas of Pallas's Sandgrouse in the Gobi Desert, their camels and horses crush eggs and young chicks (Bold & Tulgat, 2005).

10.5. Fire: See 1.7.

Conservation Measures: Approximately 13.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

216. Scientific Name: *Columba livia*

Species Authority: Gmelin, 1789

Common Names: Rock Pigeon, Rock Dove, Feral Pigeon or Feral Rock Pigeon (English), Höhvör tagtaa (Mongolian)

Subspecies in Mongolia: *C. l. nigricans* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its widespread occurrence and distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands, British, Paraguay, Anguilla, Saint Kitts and Nevis, Zambia, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Suriname, Saint Pierre and Miquelon, French Guiana, Greenland, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Mali, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Nigeria, Norway, Luxembourg, Germany,

Switzerland, Italy, China, Tunisia, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Mozambique, Swaziland, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Mauritius, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, Sri Lanka, Nepal, Mongolia, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Taiwan, Japan, Micronesia, New Zealand, Fiji, French Polynesia.

Regional Distribution: This species nests on cliffs, rock faces, caves, deserted buildings and other human-made substrates throughout Mongolia (except the alpine zone, dense taiga forest, Gobi Desert and wetlands) (Bold *et al.*, 2005; Gombobaatar, 2012). Mostly hybrids between wild and domesticated Rock and Hill Pigeons have been found in human settlements. Rock Pigeons with typical plumage occur in remote areas such as Uyench River valley (Mongol-Altai Mountain Range), Bij River (Baruunkhurai and Dzungariin Gobi) and Nömrög River (Buir Lake and Ih Khyangan Mountain) (Sergelen, 1986; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 260,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from April to late July. Wild breeding pairs breed in caves and crevices of high rocks, cliffs, gorges or rocky outcrops. Domesticated forms breed on ledges or in man-made structures. Their nests are placed on a ledge or in a hole, often well inside the various major sites, in almost dark situations. The nest is a sparse layer of stems, roots, twigs and pieces of wires. Both sexes build, but male usually brings material for female to incorporate. The female normally lays 2, rarely 1 eggs of slightly glossy white colour. Both parents incubate the eggs for 17-19 days. The two adults feed the young while they remain in the nest. They live independently from the parents at 35-36 days. Both adults and young feed on the ground and prefer seeds of a variety of plants including wheat grain, garbage and man-made leftovers in town. They form flocks of variable size. Pure wild birds inhabit remote areas while hybrids live in urban areas.

Habitat Type: 4. Grassland (4.4. near urban areas); 6. Rocky areas; 7. Caves (7.1.); 8. Desert (8.3. rocky mountains); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation(1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)- 3.1. Food-3.1.1 Subsistence use or local trade /local Chinese workers near breeding areas collect eggs and kill adults and chicks/ -3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for stuffed specimens; Arabian trappers use it as a bait animal for Saker trapping. Since Falcon trapping began in Mongolia, number of the species in cities and towns has decreased/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of insecticides against insects and rodenticide against Brandt's Vole/, 4.2. Collision-4.2.1. Pylon and building collision /hit telegraph wire and high power electric line. Collided birds are occasionally found underneath all types of power lines in the steppe (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars /; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by

drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon, Eurasian Eagle-owl, Steppe and Golden Eagles /, 8.3. Prey and food base /lack of food/ 8.4. Hybridizers / wild individuals hybridize with ferals/; 10. Human disturbance-10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

217. Scientific Name: *Columba rupestris*

Species Authority: Pallas, 1811

Common Names: Hill Pigeon, Eastern Rock Dove or Eastern Rock Pigeon (English), Khadny tagtaa (Mongolian)

Subspecies in Mongolia: *C. r. turkestanica*, *C. o. rupestris* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (1997) for further details)

Synonyms: *Columba oenas rupestris* Pallas, 1811

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Russian Federation, Kazakhstan, Turkmenistan, Pakistan, Tajikistan, India, China, Nepal, Mongolia, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species nests on rocky mountains, cliff faces, river banks and valleys with human settlements and wheat fields with suitable nesting substrates (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) in Mongol-Altai- and Gobi-Altai Mountain Ranges (up to 3,000 m asl); Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except alpine zone); Mongol Daguur Steppe and Middle Khalkh Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes; Baruunkhurai Depression and Gobi (Trans-Altai, Northern and Eastern Gobi). Hybrids among Hill Pigeon, Rock Pigeon, and Feral Pigeon occur in towns and villages. Wild birds with typical plumage have been observed in rocky mountains, mountains with cliff faces and river valleys with cliffs in areas distant from human settlements (Kozlova, 1930; Bold, 1969; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population is unknown. The population size is suspected to be decreasing owing to competition with Rock Pigeon *Columba livia* declines have been recorded (del Hoyo *et al.*, 1997; BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from April to late July. It is a solitary or semi-colonial nester. Wild Hill Pigeon pairs nest in caves, crevices and ledges

of high rocks, cliffs, and gorges of rocky mountains in the steppe and high mountains. Hybrid individuals between Rock Pigeon and Feral Pigeon breed in/under artificial substrates such as building roofs, cattle shelter roofs, deserted buildings, and abandoned man-made structures. The nest is constructed mostly by the female using stems, dried grasses, and twigs nearby. The nest is sparsely built and sometimes eggs are visible through the bottom of the nest. The female normally lays 2, rarely 1 eggs of slightly glossy white colour. Both parents lay the eggs. After hatching, young remain in the nest. Both adults care for and feed young until they leave the nest. It feeds on seeds of a variety of plants. They always stay in flocks during the non-breeding period.

Habitat Type: 4. Grassland (4.4. near urban areas); 6. Rocky areas; 7. Caves (7.1.); 8. Desert (8.3. rocky mountains); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation(1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)- 3.1. Food-3.1.1 Subsistence use or local trade /local Chinese workers near breeding areas collect eggs and kill adults and chicks/ -3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for stuffed specimens. Arabian trappers use it as a bait animal for Saker trapping. Since Falcon trapping began in Mongolia, number of the species in cities and towns has decreased/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of insecticides against insects and rodenticide against Brandt's Vole/, 4.2. Collision-4.2.1. Pylon and building collision /hit telegraph wires and high power electric lines. Collided birds are occasionally found underneath all types of power lines in the steppe (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars /; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon, Eurasian Eagle-owl, Steppe and Golden Eagles /, 8.3. Prey and food base /lack of food/ 8.4. Hybridizers /wild individuals hybridize with Rock and Feral Pigeons/; 10. Human disturbance-10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

218. Scientific Name: *Columba oenas*

Species Authority: Linnaeus, 1758

Common Names: Stock Dove or Stock Pigeon (English), Hunhel tagtaa (Mongolian)

Subspecies in Mongolia: *C. o. yarkandensis* (see Baker (1993) and del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its relatively common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Italy, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Tajikistan, China, Japan.

Regional Distribution: This species breeds in Orkhon River valley near Shaamar sum of Selenge province (Orkhon-Selenge River basins) (Boldbaatar 2006). It is found near Ulaanbaatar city (Hentii Mountain Range) on migration (Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Stenzel *et al.*, 2005; Tseveenmyadag *et al.*, 2005). Non-breeding pairs have been recorded in forest steppe, mountain steppe and wheat fields near Tsenhermandal sum in Hentii province (Middle Khalkh Steppe) in September, 2004; Hustai Nuruu National Park (Hentii Mountain Range) in June, 2007 and Shar Tal wheat field in Khurkh River valley of Hentii province (Middle Khalkh Steppe) in September, 2004 (S.Gombobaatar pers. comm.) and Khovd River of Khovd province (Gantögs, 2009).

Population: The global population consists of 1,700,000 - 3,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most migrants arrive in the breeding sites by late April-early May. Breeding season continues from May-July. It nests on trees of the edge of deciduous and mixed forests (avoiding dense trees) (Bold *et al.*, 2005). A number of pairs may breed together. The nest is constructed of twigs, roots and dead leaves lining the bottom of a cavity. The female usually lays 2, sometimes 1 eggs of slightly glossy white with a creamy tint. Parents incubate the eggs for 16-18 days and feed them. Young remain in the nest until full grown. They fledge at 27-28 days, but at times as short as 20 days. It feeds on seeds, wheat grains, and buds. They occur in pairs, sometimes single birds forage together with other common doves. They leave their breeding site for wintering grounds possibly by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 4. Grassland (4.4. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of insecticides and rodenticide against insects and Brandt's Vole/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food/; 10. Human disturbance-10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 3.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

219. Scientific Name: *Columba eversmanni*

Species Authority: Bonaparte, 1856

Common Names: Pale-backed Pigeon or Yellow-eyed Pigeon (English), Hurevter tagtaa (Mongolian)

Global Status: Vulnerable, A2bcd+3bcd

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Russian Federation, Islamic Republic of Iran, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China.

Regional Distribution: A.Bold (MAS) collected a single bird at Telmen Lake, Zavkhan province on 1 June, 1998 and a second bird at Bulgan River of Khovd province (Bold & Mainjargal, 2006).

Population: The global population consists of 10,000-19,999 mature individuals. Global breeding and resident ranges are estimated at 2,910,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There are only two documented records in the country. This species possibly passes through western Mongolia the same as other migrants by late April-early May (on spring migration) and late August-early September (on autumn migration). According to BirdLife International (2011), it breeds in holes in trees, buildings, cliffs and earth banks in semi-arid and desert areas, and human settlement and in woodland. In winter, the species occurs in open areas with scattered trees, often with agricultural crops, and in areas with suitable fruiting trees, where it roosts and feeds gregariously. The diet includes grass seeds, arable crop seeds and fruits of trees and shrubs.

Habitat Type: Potential habitats are 1. Forest (1.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.1.5. Poisoning / use of insecticides and rodenticide against insects and Brandt's Vole/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon/, 8.3. Prey and food base /lack of food/; 10. Human disturbance-10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. They possibly migrate through some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

220. Scientific Name: *Columba palumbus*

Species Authority: Linnaeus, 1758

Common Names: Common Wood-pigeon, Ring Dove or Wood Pigeon (English), Oin tagtaa (Mongolian)

Subspecies in Mongolia: *C. p. casiotus* (see Baker (1993) and del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is limited. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Georgia, Iceland, Western Sahara, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Liechtenstein, Austria, Sweden, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Ukraine, Bulgaria, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Jordan, Lebanon, Syrian Arab Republic, Iraq, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia.

Regional Distribution: This species breeds in Tes River valley (Great Lakes Depression). Birds were recorded in Khovd town and Hustai National Park. They might breed there (Shagdarsuren & Sosorbaram, 1968; Mauersberger, 1980; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2005a Boldbaatar, 2008). One bird was seen at 15 km south of Sukhbaatar town in Orkhon River valley of Selenge province (Stenzel *et al.*, 2005).

Population: The global population consists of 30,000,000 - 70,000,000 mature individuals. Global breeding and resident ranges are estimated at 12,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and possibly a wintering species. However, documented breeding records of the species are still lacking. Breeding birds arrive in breeding sites by late April-early May. Breeding season continues from May-July. It nests in trees of dense deciduous, coniferous and mixed forest in river valleys and forest steppe (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010). The nest is a thin but firm platform of twigs, the eggs sometimes visible from below. The female usually lays 2, rarely 1 eggs of slightly glossy white colour. Parents incubate the eggs for 17 days. Both adults care for and feed the young. The young remain in the nest until they can fly at 29-35 days. Both adults and young feed on seeds, grain, buds and roots. They possibly leave the country to wintering grounds late August-early September the same as other migrants.

Habitat Type: 1. Forest (1.4.); 4. Grassland (4.4. During seasonal movements and migration); 11. Artificial - Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.2.

Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of insecticides against forest insects/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms / see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon /, 8.3. Prey and food base /lack of food/, 9. Intrinsic factors- 9.9. Restricted range /restricted breeding range/; 10. Human disturbance-10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 16.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

221. Scientific Name: *Streptopelia turtur*

Species Authority: (Linnaeus, 1758)

Common Names: European Turtle-dove or Turtle Dove (English), Öрниин хуурзгене or хуурзгене (Mongolian)

Subspecies in Mongolia: *S. t. arenicola* (see Baker (1993); Howard & Moore (1994); del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown, however it is known to breed in a very limited area of western Mongolia. Its small geographic range is close to qualifying for a threat category. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Romania, Moldova, Iceland, Cape Verde, Senegal, Western Sahara, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Liberia, Ireland, Portugal, Spain, Algeria, Andorra, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Namibia, Czech Republic, Slovenia, Chad, Poland, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, Kyrgyzstan, Maldives, China, Mongolia.

Regional Distribution: This species nests and winters in deciduous and mixed forest at Bulgan and Bodonch River valleys of Bulgan sum of Khovd province (Baruunkhurai Depression). It is found in Segs Tsagaan Bogd Mountain (Trans-Altai Gobi) and N Hövsgöl Lake (Hövsgöl Mountain Range) (Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya, 2002; Boldbaatar, 2005a).

Population: The global population consists of 20,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown

Habitats & Ecology: This is a breeding visitor to Mongolia. Like other migrants, they arrive in breeding sites by late April-early May. Breeding season continues from May-July. It breeds at forest edge areas in river valleys. It nests in young poplar trees, usually in lower sites than other pigeons. The nest is a thin platform of fine twigs with a scanty lining of roots, plant stalks and grasses. The female normally lays 2, rarely 1 eggs of slightly glossy and white colour. According to Harrison (1975), both sexes incubate the eggs for 13-14 days. Young fledge at 19-21 days. Often seen in flocks in summer and autumn. The species feeds on seeds of a variety of plants on the ground in open places and forest clearings along roads. They leave their breeding ground for wintering sites by late August-early September.

Habitat Type: Potential habitats are 1. Forest (1.4.); 4. Grassland (4.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.1.5. Poisoning / use of insecticides and rodenticide against insects and Brandt's Vole/; 5. Persecution- 5.1. Pest control /see 4.1.1.5. /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, and Peregrine Falcon/, 8.3. Prey and food base /lack of food/; 10. Human disturbance-10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in the Rare Birds Mongolian Governmental Act No. 264 in 2001. Approximately 45.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

222. Scientific Name: *Streptopelia orientalis*

Species Authority: (Latham, 1790)

Common Names: Oriental Turtle-dove or Rufous Turtle Dove (English), Dornyn huurzgene or dornotyn huurzgene (Mongolian)

Subspecies in Mongolia: *S. o. orientalis*, *S. o. meena* (see Howard & Moore (1994) and del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Portugal, United Kingdom, France, Norway, Germany, Italy, Denmark, Sweden, Greece, Finland, Egypt, Turkey, Russian Federation, Israel, Saudi Arabia, Iraq, Islamic Republic of Iran, Kazakhstan, Kuwait, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Bulgan River (Mongol-Altai Mountain Range); Ih Bogd Mountain Range (Gobi-Altai Mountain Range); from Tarvagatai and Bulnai Mountains (Khangai Mountain Range) to Tes River valley; from Bayan-Tes sum to lakes in Great Lakes Depression; Tamir, Khanui and upper Orkhon Rivers and Ögii Lake, Khan Höhii Mountain, Ider, and Chuluut Rivers (Khangai Mountain Range); Hövsgöl Lake and Eg River and Darkhad Depression (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); Ulz, Herlen and other rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; Khalkh, Degee, Nömrög, Azarga Rivers and Buir Lake (Buir Lake-Khalkh River-Khyangan region) and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, steppe, desert steppe and Gobi Desert in Valley of the Lakes and the Gobi (Trans-Altai, Alashani, Northern and Eastern Gobi) (Tugarinov, 1916; Kozlova, 1930; Tarasov, 1960; Mauersberger, 1980; Sumiya & Skryabin, 1989; Smirenskii & Sumiya, 1991; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. They arrive in the breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. Parents build own nest in dense small deciduous tree and tall bushes in deciduous and mixed forests in mountain taiga forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a thin platform of twigs and roots, with finer lining layer. The female usually lays 2, occasionally 1 eggs of glossy white colour. Both sexes incubate the eggs. Chicks remain in or near their nest until they can fledge. Adults birds brood, care for and feed the chicks. They mostly stay in pairs, sometimes forming small flocks consisting of 4-6 individuals during the non-breeding season. They feed on various seeds. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. near urban areas); 8. Desert (8.3. rocky mountains); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for stuffed specimens/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of insecticides against insects in forest and rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening. Collided birds were frequently found underneath all types of power lines in the steppe during the autumn and spring migration (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming / associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders (Boldbaatar, 2005)/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon (Gombobaatar, 2006) and Peregrine Falcon/, 8.3. Prey and food base /lack of food/; 10. Human disturbance- 10.1. Recreation and tourism /since 2009, number of breeding pairs at Songino area has suddenly decreased due to construction of private houses, resorts, and tourist camps in this site/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

223. Scientific Name: *Streptopelia decaocto*

Species Authority: (Frivaldszky, 1838)

Common Names: Eurasian Collared-dove or Collared Turtle Dove (English), Булгат хуурзгене (Mongolian)

Subspecies in Mongolia: *S. d. stoliczkae* (see del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and construction, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Belize, Cuba, Cayman Islands, Bahamas, Turks and Caicos Islands, Saint Kitts and Nevis, Montserrat, Guadeloupe, Dominica, Martinique, Iceland, Morocco, Ireland, Portugal, Spain, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Monaco, Liechtenstein, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Lebanon, Syrian Arab Republic, Iraq, Islamic Republic of Iran, Kazakhstan, Korea, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Afghanistan, Pakistan, India, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Democratic People's Republic of, Republic of Korea, Japan.

Regional Distribution: This species nests on trees in river valleys and deciduous forest (Bold *et al.*, 2005; Gombobaatar, 2012) in Bulgan River valley, Bulgan sum, Khovd (Baruunkhurai); Gurvansaikhan Mountain range and Dalanzadgad town (Fomin & Bold, 1991; Sumiya *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Bold & Tseveenmyadag, 2006). S.Gombobaatar, B.Odkhuu, Dr Bernd Nicolai and his German colleagues found and photographed one nest containing 2 eggs in a poplar tree in dense forested area surrounded by fruit trees, at Songino resort camp, Tuul River valley, W Ulaanbaatar in June, 2007. The nest was constructed of dried short twigs of poplar, willow and other trees, and was located on "V" branch of the tree. Non-breeding and wintering birds were found at the followings sites; Khatanbulag, Bulgan sum of Ömnögobi province (two birds on 30 May, 1999); Juulchin Gobi tourist resort of Khankhongor sum of Ömnögobi province (a single bird on 20 May, 1999); Öndörkhaan town (one bird on 04 June, 1999); Bayantooroi and Tsogt sums in Gobi-Altai province (an individual on 25 May 2001); Tuul River in Hustai NP of Altanbulag sum in Töv province (two birds on 7 October, 2001); Khurkh town of Hentii province (two individuals on 01 May, 2002); Öndörkhaan town (two birds on 17 June, 2002); Herlen River of Mörön town in Hentii province (one bird on 05 June, 2002); Öndörkhaan town (36 birds on 28 October, 2002); Altan -Ovoo of Suhbaatar province (20 individuals on 02 June, 2003); Choibalsan town (one bird on 07 June, 2003); Bulgan sum centre of Ömnögobi province (6 birds on 30 May, 1999 and 4 individuals 10 June, 2003); Byaruukhai spring of Nomgon sum of Ömnögobi province (one bird on 21 June, 2003); Ih Gazar Chuluu of Gurvansaikhan sum of Dundgobi province (one bird on 27 June, 2003); Shar Tal wheat farming centre of Khurkh sum in Hentii province (one bird on 27 June, 2003); Bayantsagaan sum of Töv province (6

birds on 11-19 September, 2003); Oyu Tolgoi base camp of Khanbogd sum in Ömnögobi province (3 birds on 14 September, 2003); XII district in Ulaanbaatar (4 birds on 21 September, 2003) (Bold & Tseveenmyadag, 2006; N.Batsaikhan, N.Tseveenmyadag, A.Bold, D.Batdelger, T.Todgerel, Sh.Boldbaatar, Johan Stauber pers. comm.). It is also found in the following sites; Choir town of Gobisumber province (2 birds photographed on 5 June, 2005), Shivee Ovoo of Dornogobi province (2 birds photographed on 20 June, 2005) and Bayan sum of Töv province (2 birds photographed on 11 June, 2006), Öndörkhaan town (one bird on 23 June, 2006) and Shainshand town (two birds, seen on 8 July, 2006) (S.Gombobaatar pers. comm.), Selenge River valley (Boldbaatar, 2005), Choibalsan town (Tseveenmyadag, 2008); Khar-Us Lake and Batshireet sum of Hentii in 2008 (Sh. Boldbaatar pers. comm.). S.Gombobaatar, E.Unurjargal and American ornithologist observed and photographed a pair at Övörkhangai town on 22 August, 2010 and Saikhan-Ovoo sum centre of Dundgobi province on 25 August, 2010 and one individual at Dalanzadgad town on 29 August, 2010 (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 20,000,000 - 50,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder and partial migrant. Most individuals are migratory. However, there are only a few documented breeding records in the country. Breeding season continues from May-July. Both adults construct their nest in trees. The nest is a thin platform of fine twigs and plant stems. Female lays 2 eggs of slightly glossy white colour. Parents incubate the eggs for 14-16 days. Both sexes care for and feed the young in the nest. The young fly at c. 18 days and leave the nest area at c.3 weeks. They feed on seeds of various plants, wheat grain, fruits of trees and bushes. Since 1990, distribution of the species within the country has been extending. They forage on the ground in pairs or small groups consisting of 3-6 individuals in towns or villages.

Habitat Type: 4. Grassland (4.4. near urban areas); 8. Desert (8.3. rocky mountains); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally in dry summers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for stuffed specimens/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /use of insecticides /, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders (Boldbaatar, 2005)/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon, Peregrine Falcon/, 8.3. Prey and food base /lack of food (Bold &Tseveenmyadag, 2006)/; 10. Human disturbance- 10.1. Recreation and tourism /since 2009, breeding pairs at Songino area have suddenly disappeared due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 22.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Columbiformes

Family: Columbidae

224. Scientific Name: *Streptopelia senegalensis*

Species Authority: (Linnaeus, 1766)

Common Names: Laughing Dove or Palm Dove (English), Öödsön huurzgene (Mongolian)

Subspecies in Mongolia: *S. s. ermanni*, *S. s. cambayensis* (see Howard & Moore (1994) and del Hoyo *et al.* (1997) for further details)

Synonyms: *Columba senegalensis* (Linnaeus, 1766), or *Stigmatopelia senegalensis* (Linnaeus, 1766)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Portugal, Algeria, Cote d'Ivoire, Burkina Faso, Ghana, Niger, Uzbekistan, Benin, Nigeria, Italy, Cameroon, Gabon, São Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, the Democratic Republic of the Congo, Angola, Namibia, Chad, Malta, Central African Republic, South Africa, Botswana, Greece, Finland, Sudan, Zambia, Egypt, Zimbabwe, Lesotho, Rwanda, Burundi, Tanzania, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, Oman, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Bangladesh, Bhutan, Australia.

Regional Distribution: This species breeds in Bulgan River valley in Bulgan sum of Khovd province (Baruunkhurai Depression) (Fomin & Bold, 1991; Dawaa *et al.*, 1994). Single bird was found in Buyant River valley (Khovd town) of Khovd province on 29 November, 2006 (Bräunlich, 2006a). This species presumably winters in the Khovd area.

Population: The global population is unknown. In Europe, the breeding population is estimated to number 61,000-210,000 breeding pairs, equating to 183,000-630,000 individuals (BirdLife International 2004), but Europe forms <5% of the global range (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and presumably winters in the west. Like other migrants, they arrive in breeding sites by late April-early May. Breeding season continues from May-July. It nests in trees in deciduous and mixed riparian forest of the river valley. The nest is a flimsy platform of thin twigs and other plants. The female usually lays 2, rarely 1 eggs of slightly glossy white colour. Both adults incubate the eggs for 12-14 days (Harrison, 1975). Young stay in/near the nest until they fledge. Both parents brood, care for, and feed them. The young begin to move from their nest at 10 days and can fly at 13 days. They feed on seeds of various plants. Most migrants leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: Potential habitats are 1. Forest (1.4.); 4. Grassland (4.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial, 4.1.1.5.

Poisoning /use of insecticides against insects in forest/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with loss and degradation of wetland habitat caused by drought /; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /birds of prey including Saker Falcon and Peregrine Falcon/, 8.3. Prey and food base /lack of food/; 10. Human disturbance- 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Cuculiformes

Family: Cuculidae

225. Scientific Name: *Cuculus micropterus*

Species Authority: Gould, 1837

Common Names: Indian Cuckoo or Short-winged Cuckoo (English), Jagar höhö or bor sharga höhö (Mongolian)

Subspecies in Mongolia: *C. m. micropterus* (see Howard & Moore (1994) and del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Russian Federation, Pakistan, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: S.Gombobaatar (NUM & MOS), N.Batsaikhan (NUM), N.Tseveenmyadag (MAS), U.Zöphel and German team observed a single bird on the top of willow tree at Nömrög River (47°01'N; 119°22'E) of Dornod province on 6 June, 1995. On 8 June, U.Zöphel observed the same bird 10 km from the first record in the same river valley (German-Mongolian expedition Dornod, 1995; Gombobaatar & Bold, 2002; Tseveenmyadag *et al.*, 2006).

Population: The global population has not been estimated (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant (Gombobaatar & Bold, 2002). It was observed two times in Nömrög River valley in 1995. The species migrates along eastern Mongolia and might breed there. However there is no proof for its breeding in Mongolia. It was observed in riparian forest (fruit, willow, larch trees and bushes) in Nömrög River valley. They feed on terrestrial insects (Coleoptera) and their larvae, spiders, and small lizards (Neifeld 1963). Call is "Ka- ka- ka- koo" and sounds like the fifth Beethoven symphony. The same as other migratory birds, they migrate through eastern Mongolia by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn

dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.1.5. Poisoning / use of insecticides against insects in forest/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 8. Changes in native species dynamics-8.2. Predators /birds of prey/, 8.3. Prey and food base /lack of food/; 10. Human disturbance-10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It migrates through eastern Mongolian protected areas (Khalkh -Nömrög Strictly Protected Area) and Important Bird Areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Cuculiformes

Family: Cuculidae

226. Scientific Name: *Cuculus canorus*

Species Authority: Linnaeus, 1758

Common Names: Common Cuckoo or Cuckoo (English), Egel höhöö or höhöö (Mongolian)

Subspecies in Mongolia: *C. c. canorus*, *C. c. subtelephonus* (see del Hoyo *et al.* (1997) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Hungary, Virgin Islands, U.S., Virgin Islands British, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Cape Verde, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Islamic Republic of Iran, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Malawi, Ethiopia, Kenya, Israel, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Mayotte, Armenia, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Lao People's Democratic Republic, Viet Nam, Saudi Arabia, Senegal, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds in Mongol-Altai and Gobi-Altai Mountain Ranges; Khovd and Böhmörön Rivers, northern Turgen (Kharkhiraa and Turgen Mountains); Tes, Nariin, Torkholig Rivers (Northern Uvs Depression); Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers with patchy birch forest (Zavkhan Desert Steppe Depression); upper Orkhon River and Sangiin Dalai, Ögii Lakes with coniferous, deciduous and mixed forest parts (Khangai Mountain Range); Ider and Chuluut Rivers with forest in Northern Bulnai (Tarvagatai-Bulnai Range); Hövsgöl Lake and Eg River

(Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa, Yeröö River valleys with coniferous, deciduous and mixed forests (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen Rivers (Hentii Mountain Range); Herlen and Ulz Rivers (Middle Khalkh Steppe and Mongol Daguur Steppe); Khalkh, Degee, Nömrög, Azarga, and Galdastai Rivers (Buir Lake-Khalkh River-Khyangan region); Bulgan River (Baruunkhurai Depression or Dzungariin Gobi). It is found in different habitats from mountain taiga forest to Gobi Desert, including oases in the Gobi on migration (Kozlova, 1930; Bold, 1969; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Gombobaatar & Bold, 2002; Sumiya, 2002; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 25,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 37,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. Its breeding distribution depends on the distribution of host birds. However this species inhabits coniferous, deciduous and mixed forests in mountain taiga forest, forest steppe, mountain slopes, and lake and river valleys during the breeding season (Gombobaatar & Bold, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding birds do not build own nest, they lay their eggs into other bird's nests (nest parasitism). Females watch the nest of the host and lay their eggs when the host's clutch is laid. Host parents incubate the Cuckoo egg, and brood and feed Cuckoo's chicks until they fledge. According to Harrison (1975), there is some evidence that unparasitised nests and eggs may be destroyed, possibly causing host to re-nest. In addition to the regular hosts, many other species may be made into hosts. Parasitised nests are generally open cup but may also include domed nests and nests in holes. The recorded hosts for the species in Mongolia are Oriental Reed-warbler in Nömrög River of Dornod province in 1995 (Gombobaatar & Bold, 2002); Yellow Wagtail in Döröö Lake of Dornod province in June, 1994 (Gombobaatar & Bold, 2002); Siberian Stonechat at Mönhsaridag Mountain of Hövsgöl province, undated (Sumiya&Skryabin, 1989); Brown Accentor at Yolyn Am in Zuunsaikhan Mountain of Ömnögobi province (Gombobaatar & Bold, 2002); Lesser Whitethroat in Övörgorkhi in Terelj area in June, 1980 (R.Samiya pers. comm.). This Cuckoo's eggs are often found in the nests of Eurasian Hoopoe, White-cheeked Starling, Richard's Pipit, Blyth's Pipit, Olive-backed Pipit, Brown Shrike, Greater Whitethroat Greenish Warbler, and Yellow-browed Warbler in Terelj and Bogd Mountain of Hentii Mountain Range (S.Gombobaatar pers. comm. and photographs). The female lays in the nest of the host species 1-6 eggs of moderately glossy, very variable colours. Shape and colour of the eggs are very similar to host eggs (mimicry in colour and markings), but eggs are recognizable in shape, size, colour and markings. Host parent birds incubate the eggs for 12-13 days. Young cuckoos hatch when host has eggs or newly-hatched young. Young cuckoo squirms beneath these one at a time, rearing up backwards against the sides of the nest-cup and throwing them out. Two cuckoos in one nest will compete. Desire to eject companions disappears after 3-4 days. At the end of that time, only the Cuckoo's chick(s) generally remain(s) in the nest. Parent birds care for and feed the chick(s) in/near their nest until chicks fledge. The chicks leave the nest at 20-23 days. They feed on various insects and their larvae, also on caterpillars. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for stuffed specimens/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric

pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/
6.3.10. Noise pollution /Industrial and noise pollution/; 7. Natural disasters-7.1. Drought-7.2. Storms
/see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes
in native species dynamics-8.1. Competitors /finding the nest of hosts/ 8.2. Predators /birds of prey
including Saker Falcon (Gombobaatar, 2006)/, 8.3. Prey and food base /decrease of insects and their
larvae after insecticide use, is also a cause of lack of food sources and lack of the food by small hosts/; 10.
Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and
tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.
Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Cuculiformes

Family: Cuculidae

227. Scientific Name: *Cuculus saturatus*

Species Authority: Blyth, 1843

Common Names: Oriental Cuckoo (English), Khanamal höhöö (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Pakistan, India, China, China, Nepal, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Viet Nam, Malaysia, Cambodia, Taiwan, Philippines. It is considered vagrant in Lao People's Democratic Republic.

Regional Distribution: This species breeds at Buyant, Khovd Rivers (Mongol-Altai Mountain Range); Böhmörön River with patchy deciduous forest in Northern Turgen (Kharkhiraa and Turgen Mountains); Tes River (Great Lakes Depression); Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes; Khan Höhii-, Tarvagatai, Bulnai Mountains; Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); Herlen-Ulz River basins; Khalkh, Degee, Nömrög and Azarga Rivers (Buir Lake-Khalkh River-Khyangan region); Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas and possibly through forest steppe, mountain steppe, desert steppe and Gobi Desert and river valleys (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Gombobaatar & Bold, 2002; Terbish & Gombobaatar, 2003; Sumiya, 2002; ; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most migrants arrive in breeding sites by late April-early May. Breeding season continues from May-July. During the breeding season, it nests in coniferous, deciduous and mixed forests in mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). Breeding birds lay their eggs in other bird's nests (nest parasitism). Females watch the nest of the host and lay their eggs when the host's clutch is laid. The female lays its egg in the

nest of Yellow-browed Warbler, Arctic Warbler, Greenish Warbler, Pallas's Warbler, Siberian Chiffchaff (Gombobaatar & Bold, 2002), Olive-backed Pipit, Richard's Pipit, Blyth's Pipit and Lesser Whitethroat in Tuul and Terelj River valleys and Bogd Mountain. Their eggs are very similar to host eggs in shape, size and colour (mimic eggs of host). Eggs or small young of host are ejected by young Oriental Cuckoo in first few days after hatching. Young cuckoo squirms beneath these one at a time, rearing up backwards against the sides of the nest-cup and throwing them out. Host parents incubate the egg for 12-13? days. Adopted parents care for and feed the chick (s) in/near their nest until chicks fledge. They feed on various arthropods, insects (Coleoptera) and their larvae, spiders and annelids. It is a solitary migrant. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation -1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting / logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /illegal hunting for stuffed specimens/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /migrants flying at low levels at night and late evening/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming / associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders (Boldbaatar, 2005)/; 7. Natural disasters-7.1. Drought-7.2. Storms / see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.1. Competitors /finding the nest of hosts/ 8.2. Predators /birds of prey including Saker Falcon (Gombobaatar, 2006)/, 8.3. Prey and food base /lack of food by small hosts/; 10. Human disturbance-10.1. Recreation and tourism /due to construction of private houses and tourist resorts in Terelj area, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Cuculiformes

Family: Cuculidae

228. Scientific Name: *Cuculus poliocephalus*

Species Authority: Latham, 1790

Common Names: Lesser Cuckoo, Little Cuckoo or Small Cuckoo (English), Khurgan höhöö (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: The Democratic Republic of the Congo, South Africa, Zambia, Zimbabwe, Russian Federation, Tanzania, Malawi, Kenya, Somalia, Seychelles, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: Hungarian bird ringers caught and measured a single bird in Delgermörön River valley in Hövsgöl province in August of 1995, (Gombobaatar & Bold, 2002).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 5,180,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The same as other migratory birds, they possibly pass through the country by late April-early May (on spring migration) and by late August-early September (on autumn migration). They lay their eggs in other bird's nests (nest parasitism). They feed on insects and their larvae. It migrates singly. They like to perch on a top of trees while calling.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging in the nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.1.5. Poisoning / use of insecticides against insects in forest/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 8. Changes in native species dynamics-8.2. Predators /birds of prey/, 8.3. Prey and food base /lack of food/; 10. Human disturbance-10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It migrates through protected areas (Hövsgöl) and some Important Bird Areas in Mongolia during the migration.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

229. Scientific Name: *Otus scops*

Species Authority: (Linnaeus, 1758)

Common Names: Common Scops-owl, Eurasian Scops Owl or Scops Owl (English), Yerdin orvolgo (Mongolian)

Subspecies in Mongolia: *O. s. pulchellus* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (1999) for further details)

Synonyms: *Strix scops* (Linnaeus, 1758)

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Belarus,

Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Bulgan River (Mongol-Altai Mountain Range), Tes River (Great Lakes Depression), Tuul, Terelj, upper Onon and Ulz River valleys (Hentii Mountain Range). It is found in the Khangai Mountain range during the breeding season (Kozlova, 1930; Tarasov, 1960; Piechocki *et al.*, 1987; Sumiya & Skryabin, 1989; Kleinstaubes & Succow, 1987; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2010).

Population: The global population consists of 1,000,000 - 3,000,000 mature individuals. Global breeding and resident ranges are estimated at 8,550,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor. Most breeding birds

arrive in the breeding sites by late April-early May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from May-July. It nests in tree holes and rarely deserted nests of other birds in deciduous and mixed forest in mountain taiga, forest steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). It breeds in open woodland and riparian forest. The female usually lays 3-4, sometimes 2-6 eggs of slightly glossy white colour. Parents incubate the eggs for 24-25 days. The female broods, cares for and feeds the young. The male hunts for rodents such as voles, mice and small birds, occasionally insects in forest and forest steppe. The young leave the nest at c.3 weeks, and remain nearby for a while, becoming independent at c.7 weeks. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. On migration, individuals occur in forested and rocky areas in Mongolia.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

230. Scientific Name: *Otus sunia*

Species Authority: (Hodgson, 1836)

Common Names: Oriental Scops-owl, Asian Scops Owl, Little Scops Owl, Eastern Scops Owl, East Asian Screech Owl or Sunia Owl (English), Oin orvolgo (Mongolian)

Subspecies in Mongolia: *O. s. sunia* (see del Hoyo *et al.* (1999) for further details)

Synonyms: *Scops sunia* (Hodgson, 1836)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Russia, Mongolia.

Regional Distribution: An individual of this species was found at Menen buudal, Choibalsan in May, 2004 (Osipova, 1984; German-Mongolian expedition Dornod, 1995; Tseveenmyadag *et al.*, 2006) and Galuut Lake of Dornod province (N. Tseveenmyadag pers. comm.).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is a passage migrant and possibly a breeding visitor. The species arrives at breeding sites by late April-early May, the same as other breeding visitors. Breeding season continues from May-July. It breeds in deciduous forest possibly along Nömrög River valleys and in plains and Ih Khyangan Mountain. Its breeding habitat is similar to Scops Owl. They nest in tree holes. They feed on insects and small rodents. They leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/ 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.1.5. Poisoning /use of insecticides against insects in forest and rodenticide against Brandt's Vole in the steppe/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 65.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes
Family: Strigidae

231. Scientific Name: *Nyctea scandiaca*

Species Authority: (Linnaeus, 1758)

Common Names: Snowy Owl (English), Tsagaan uulij or tsevdgiin uuli (Mongolian)

Synonyms: *Bubo scandiaca* (Linnaeus, 1758); *Strix scandiaca* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Saint Pierre and Miquelon, Bermuda, Greenland, Iceland, Ireland, Portugal, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Poland, Croatia, Hungary, Slovakia, Serbia, Albania, Finland, Latvia, Ukraine, Russian Federation, Islamic Republic of Iran, Kazakhstan, Turkmenistan, Pakistan, India, Kyrgyzstan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species is found in forest steppe, mountain steppe and river valleys (Gombobaatar, 2012) in Uvs Lake Depression, Northern Khangai Mountain Range, Hövsgöl Mountain Range, Orkhon and Selenge River basins, Onon, Balj River valleys (Hentii Mountain Range), Ulz River valley (Mongol Daguur Steppe), Khalkh, Nömrög Rivers and Buir Lake (Buir Lake-Khalkh River-Khyangan region) early spring and winter (Kozlova, 1930; Bold, 1973; Berezovskii, 1981; Skryabin & Sumiya, 1981; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Zabelin & Bayarkhuu, 1998; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2010).

Population: The global population consists of 300,000 mature individuals. Global breeding and resident ranges are estimated at 5,770,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a winter visitor. They arrive in wintering sites by late November - early December, depending on snowfall and wind. It stays in areas where the prey species are abundant and there is thin snow cover in the country. They hunt Brandt's Vole (*Lasiopodomys brandti*) and Daurian Pika (*Ochotona daurica*) in C&E Mongolia, Mongolian Gerbil (*Meriones unguiculatus*) and Midday Gerbil (*Meriones meridianus*) in C&NW and NW Mongolia. They hunt prey while perched on a pole, rocks and top of a hill or flying low in an unhurried flight. They stay in open steppe, forest steppe and lake and river valleys in northern, northeastern and northwestern parts of the country until late April. Most birds leave the country by February-late April, depending on food availability and weather conditions.

Habitat Type: Potential habitats are 3. Shrub-land (3.4.); 4. Grassland (4.1., 4.4.); 5. Wetlands (5.4.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing and drought/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities and pollution of wetlands from mercury/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence

use or local trade /illegal hunting for stuffed specimens/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning / use of rodenticide against Brandt's Vole/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought- /see 1.1.4.1./, 7.3. Temperature extremes /overcooling/; 8. Changes in native species dynamics-8.3. Prey and food base /lack of food/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses and tourist resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Listed in CITES Appendix II. Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

232. Scientific Name: *Bubo bubo*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Eagle-owl, Eurasian Eagle-owl or Northern Eurasian Eagle-owl (English), Egel sharshuvuu or shar shuvuu (Mongolian)

Subspecies in Mongolia: *B. b. yenisseeensis*, *B. b. sibiricus*, *B. b. ussuriensis* (see del Hoyo *et al.* (1999) for further details)

Synonyms: *Strix bubo* (Linnaeus 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Mauritania, Mali, Portugal, Spain, United Kingdom, Gibraltar, France, Niger, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Chad, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Israel, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Mongolia, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan. It is regionally extinct in Turkmenistan.

Regional Distribution: This species nests in rocky mountains, steppe hills with broken rocks, lake shores with cliffs and river banks, forested areas and river valleys in all natural zones and belts in the country. Breeding attempts have not been confirmed in dense taiga forest, steppe plain, Gobi Desert without trees, and wetlands (Przewalskii, 1876; Potanin, 1883; Molleson, 1906; Bianki, 1915; Tugarinov, 1916; Tugarinov, 1929; Kozlova, 1930; Tugarinov, 1932; Kozlova, 1932; Sushkin, 1938; Dementiev, 1941; Tarasov, 1944 and 1960; Bold, 1969; Fischer, 1970; Kozlova, 1975; Kleinstäuber & Succow, 1978; Potapov, 1980; Mauersberger, 1980; Mauersberger, 1982; Piechocki *et al.*, 1981; Mauersberger *et al.*, 1982; Stephan, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Boldbaatar, 1997; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003;

Terbish & Gombobaatar, 2003; Bold, 2005; Bold *et al.*, 2005; Bold & Munkhbayar, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Javkhlantsetseg *et al.*, 2007; Boldbaatar, 2008; Tumurbat *et al.*, 2007 & 2009; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012).

Population: The global population consists of 250,000 - 2,500,000 mature individuals. Global breeding and resident ranges are estimated at 32,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. They hold the breeding sites all year around. They breed in a wide range of habitats mentioned above. Breeding pairs do not build own nest. The nest is a shallow unlined scrape on the ground, steep hillsides, on ledges, crags, gorges or cliffs, usually sheltered by bushes and tall grasses, in rock crevices or caves, in large tree hollows, and in large old nests of other species of birds. According to Tumurbat *et al.* (2007&2009), from 2004 to 2006, five nests were located in cliffs, three in rock columns, two in sandy precipices and one in a rock ledge. Nest sites consisted of natural large cavities, holes, or crevices that had 2-4 m tall bushes (*Amygdalus pedunculata*) at the entrance and were in the proximity of a lake or other water source. Nest sites were located among small broken rocks or on rock ledges on mountain slopes and rocky mountain outcrops, or in sand cliffs on river banks. Mean height (above ground) of nest site structure (e.g., cliff faces) was 7.6 (± 5.9 m, 0.5- 20) and height of nest entrance was 3.1 (± 2.5 m, 0-7). Nest cavities were well-sheltered from the elements and close to nests of other steppe birds including the Upland Buzzard, Red-billed Chough, and Northern Raven. Three breeding pairs had 2-5 potential nest sites 5-20 m from each other within their breeding territory. Eggs were laid in a scrape on sandy and gravel substrate. Average clutch size was 1.7 (± 0.9 , 1-3) and brood size was 1.5 (± 0.5 , 1-2), smaller than those reported in Kazakhstan (Pazhenkov & Korzhev 2006; Karyakin *et al.*, 2007). Both adults incubate the eggs for 34-36 days. Young hatch at intervals of several days. The female broods young while the male brings food. Later both parents hunt. Young may leave nest at c. 6-10 weeks and can fly well at c.14 weeks. Nest structure or entrance height was not correlated with the number of eggs laid or young fledged. We noted variation in the reproductive success of the Eurasian Eagle-owl and think that it was related to changing prey availability (not measured). Of the 276 prey identified, 72.1% were mammals, 26.1% birds, 0.7% amphibian, and 1.1% beetles. The most frequent mammalian prey identified were the Mongolian Five-toed Jerboa (*Allactaga sibirica*), Campbell's Hamster (*Phodopus campbelli*), and the Daurian Hedgehog (*Mesechinus dauricus*). We reason that the relatively high percentage of these prey in the diet was because they are active at night when Eurasian Eagle-owls are hunting. The predominant avian prey identified were Eurasian Sparrow Hawk, Saker Falcon, Little Owl and Red-billed Chough. Most (64.7%) of the avian prey species were observed to breed in the nesting territories of Eurasian Eagle-owl (unpublished data). Of all the prey species in the diet, 35.3% were passage migrants, and included Eurasian Sparrow Hawk, White Thrush, and Eye-browed Thrush that were observed to perch (and roost) on bushes near Eurasian Eagle-owl nest sites – probably the reason that high numbers appeared in their diet. The average weight of bird prey was 411.9 grams (range 15-1,500; N = 18) and 371.8 grams (range 17- 2,000, N=13) for mammals. The heaviest (Goshawk) and lightest (Flycatcher) avian prey species were captured while they were migrating through Eurasian Eagle-owl territories. The Mongolian Marmot (*Marmota sibirica*) and Tolai Hare (*Lepus tolai*) were the heaviest mammal prey identified. Weight of the most frequent prey species in the diet varied from 15 to 300 grams for birds and from 17 to 200 grams for mammals. Average length of prey species was 336.1 \pm 176 mm (140-700) for birds and 252.8 \pm 161 mm (102-630) for mammals, whereas the most frequent length of prey species was 101- 400 mm. Breeding pairs use the same breeding site in winter. Adult birds rest and sit in/under dense bushes and shrubs under or near nest sites and young fledglings also stay in/under these bushes at midday.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.1., 4.4.); 5. Wetlands (5.3., 5.4., 5.13., in winter) ; 6. Rocky areas; 7. Caves and Subterranean Habitats (7.1.); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.3., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-

1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /Kazakh people use their feathers for traditional clothes and other customs. Primaries and secondaries are used for shaman's ceremonies. Either local people or city people shoot this species and sell feathers in the market/; 4. Accidental mortality- 4.1. By-catch-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest and rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /electrocuted birds were occasionally found under 15 KV power poles in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance-10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

233. Scientific Name: *Strix uralensis*

Species Authority: (Pallas, 1771)

Common Names: Ural Owl or Ural Wood Owl (English), Khuv uuli or khuv begbaatar (Mongolian)

Subspecies in Mongolia: *S. u. uralensis*, *S. u. yenisseeensis*, *S. u. nikolskii* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (1999) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Spain, Norway, Germany, Italy, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Russian Federation, Kazakhstan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds in Khangai (from North Khangai north to the country

border), Hövsgöl and Hentii Mountain Ranges (south to Bogd Khaan) and Kharkhiraa and Turgen Mountains (patchy deciduous forest), patchy forests in Herlen-Ulz River basins and Buir Lake-Khalkh River-Khyangan region (Fomin & Bold, 1991; Zabelin, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 500,000 - 8,000,000 mature individuals. Global breeding and resident ranges are estimated at 14,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding pairs nest in tree holes, old nests of raptors and very rarely on the ground between tree-roots in coniferous and mixed forests in mountain taiga, forest steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The female usually lays 3-4, occasionally 2-6 eggs of white colour. Young hatch at different dates and vary in size. They leave the nest at c. 4-5 weeks, before they can fly properly. Both parents brood and care for the young. The male hunts primarily for rodents and small to medium sized birds as well. They usually watch for prey while perched in a tree. In winter, they move down to forest steppe and river valley forests and rarely in planted trees in town.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. near forest); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. in winter).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons /; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest /; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 10.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

234. Scientific Name: *Strix nebulosa*

Species Authority: Forster, 1772

Common Names: Great Grey Owl, Lapland Owl Dark Wood Owl or Striped Owl (English), Ugalzan uuli or ugalzan begbaatar (Mongolian)

Subspecies in Mongolia: *S. n. lapponica* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (1999) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category

assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Norway, Germany, Sweden, Poland, Finland, Lithuania, Ukraine, Belarus, Russian Federation, Kazakhstan, China, Mongolia. It is regionally extinct in Latvia.

Regional Distribution: This species breeds in Hövsgöl and Hentii Mountain Ranges (Kozlova, 1930; 1932; Bold, 1969; Bold, 1973; Bold, 1977; Skryabin & Sumiya, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; 2002; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2010).

Population: The global population consists of 60,000 mature individuals. Global breeding and resident ranges are estimated at 19,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. Breeding pairs nest in tall broken tree holes and crevices and sometimes old nests of other raptors in coniferous and mixed forests in mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The female lays 3-5 eggs of slightly glossy white colour. Number of eggs and chicks depends on prey abundance in breeding areas. Female incubates the eggs for 28-30 days, exceptionally longer. Young hatch at different times and vary in size. The female guards the young and feeds them on food brought by the male. The young have eyes closed for first seven days; feather during 10-35 days; begin to leave the nest at 3-4 weeks but do not fly well until 5 weeks. They often hunt diurnally, primarily on various rodents (voles, mice, squirrels), occasionally on birds (Hazel Grouse etc).

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. near forest).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 20.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

235. Scientific Name: *Surnia ulula*

Species Authority: (Linnaeus, 1758)

Common Names: Northern Hawk-owl or Hawk Owl (English), Kharsuun begbaatar or kharsuun uuli (Mongolian)

Subspecies in Mongolia: *S. u. ulula*, *S. u. tianschanica* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (1999) for further details)

Synonyms: *Strix ulula* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Bermuda, Spain, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Denmark, Austria, Sweden, Czech Republic, Poland, Hungary, Slovakia, Serbia, Romania, Finland, Ukraine, Estonia, Russian Federation, Kazakhstan, China, Mongolia, Democratic People's Republic of Korea, Japan, It is regionally extinct in Latvia.

Regional Distribution: This species breeds in Khangai, Hövsgöl and Hentii Mountain Ranges and Uvs Lake valley, patchy forests in Herlen and Ulz River valleys, and the Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Bold, 1969; Bold, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2010).

Population: The global population consists of 130,000 mature individuals. Global breeding and resident ranges are estimated at 21,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. Breeding pairs nest in tree holes and well-sheltered old nests of raptors and other large birds in mature coniferous and mixed forests in taiga, forest steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The female usually lays 3-10, rarely 13 eggs of glossy white colour. Parents incubate the eggs for 25-30 days. Both adult brood and care for the young. The female cares for and feeds young while the male brings food. Often hunts diurnally, usually in morning and evening. It hunts for prey either from an ambush, or circling around fields and forest clearings. They feed on small rodents (voles, mice) and on birds. The young leave the nest at c. 23-27 days. In winter they move down to forest steppe and river valley forest.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. near forest).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1.

Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons /; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest /; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

236. Scientific Name: *Glaucidium passerinum*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Pygmy-owl or Pygmy Owllet (English), Buslag sulig or dornodyn bugeehei (Mongolian)

Subspecies in Mongolia: *G. p. orientale*, *G. p. passerinum* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (1999) for further details)

Synonyms: *Strix passerine* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Spain, France, Belgium, Norway, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Slovakia, Serbia, Romania, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Russian Federation, Kazakhstan, China, Mongolia.

Regional Distribution: This species breeds in Khangai, Hentii and southern Hövsgöl Mountain and Ih Khyangan Mountain ranges (Kozlova, 1930; Kozlova, 1933; Bold, 1969; Bold, 1973; Sumiya & Skryabin, 1989; Sumiya *et al.*, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2010).

Population: In Europe, the breeding population is estimated to number 47,000-110,000 breeding pairs, equating to 141,000-330,000 individuals (BirdLife International, 2004). The global population consists of 300,000-1,500,000 mature individuals. There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. It nests in deciduous tree holes and very rarely old well-sheltered nests of Black-billed Magpie and other birds in coniferous and mixed forests in taiga forest (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Gombobaatar, 2012). According to the results of our studies in 2002-2009, in the north of Khan Hentii and Selenge River basins, the Pygmy Owl is common in larch forest on the northern slopes of the mountains and along the edges of woodlands (Boldbaatar, 2003, 2003a, 2005, 2006, 2007, & 2008). The female usually lays 4-6, sometimes 3-7 eggs of slightly glossy white. Parents incubate the eggs for 28 days. Both parents brood, care, and feed the young. Mostly The male hunts for small rodents (voles, lemmings), sometimes for birds, and brings them to the female and young. Young leave nest at 29-32 days. In the non-breeding season, especially winter, they move down and reach forest of river valleys and forest steppe.

Habitat Type: 1. Forest (1.1., 1.4.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons /; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.1.5. Poisoning /use of insecticides against insects in forest /; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

237. Scientific Name: *Athene noctua*

Species Authority: (Scopoli, 1769)

Common Names: Little Owl (English), Khotny bugeehei (Mongolian)

Subspecies in Mongolia: *A. n. orientalis*, *A. n. plumipes* (see Howard & Moore (1994) and del Hoyo *et al.* (1999) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Greece, Cyprus, Western Sahara, Mauritania, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Niger, Andorra, Netherlands, Norway, Luxembourg, Switzerland, Italy, Tunisia, Denmark, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Poland, Malta, Hungary, Montenegro, Albania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Belarus, Turkey, Moldova, Israel, Jordan, Lebanon, Syrian Arab Republic, Iraq, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Nepal, Mongolia, Democratic People's Republic of Korea, Republic of Korea, New Zealand. It is possibly regionally extinct in Liechtenstein.

Regional Distribution: This species breeds in Mongol-Altai and Gobi-Altai Mountain Ranges (except for alpine and subalpine zones and wet meadows), Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense forest in taiga), Middle Khalkh Steppe, Mongol Daguur Steppes, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression, and Gobi (Trans-Altai, Northern and Eastern) (Przewalskii, 1876; Potanin, 1883; Molleson, 1906; Bianki, 1915; Tugarinov, 1916; Tugarinov, 1929; Kozlova, 1930; Tugarinov, 1932; Kozlova, 1932; Sushkin, 1938; Tarasov, 1944 and 1960; Bold, 1969; Fischer, 1970; Kozlova, 1975; Kleinstäuber and Succow, 1978; Potapov, 1980; Mauersberger G. 1980; Piechocki *et al.*, 1981; Mauersberger *et al.*, 1982; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Boldbaatar, 2010).

Population: The global population consists of 5,000,000 - 15,000,000 mature individuals. Global breeding and resident ranges are estimated at 26,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. It inhabits variety of habitats across Mongolia such as forest steppe, rocky mountain, all type steppes with rock columns and rock boulders, forested areas of steppe and Gobi Desert, river and lake valleys with high sandy precipices and banks, human settlements and planted trees. Breeding pairs nest in burrows, caves, precipices, cliff cavities and crevices, tree-holes, holes and cracks of deserted buildings in forest steppe, mountain steppe, desert steppe, Gobi Desert and valleys of steppe rivers and lakes (Sumiya & Skryabin, 1989; Boldbaatar, 1997; Bold *et al.*, 2005; Boldbaatar, 2010; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The female usually lays 3-5, occasionally 2-8 eggs of non-glossy white colour. Both parents brood, care for and feed young in the nest. Young may leave nest at c.4 weeks and can fly well c.5 weeks. In winter, they live in the areas where prey species are abundant and snow cover is thin. Breeding success depends on food and weather conditions. They feed on small rodents (voles, hamsters, gerbils), on small passerines (Horned Lark, Mongolian Lark, Short-toed Lark and Pipits), lizards, and insects. They often perch on elevated substrates like telegraph and electric line poles, rocks, cliffs, trees, bushes, and even small rocks and mounds of soil.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.1., 4.4.); 5. Wetlands (5.3., 5.4., 5.13., in winter) ; 6. Rocky areas; 7. Caves and Subterranean Habitats (7.1.); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.3., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 4. Accidental mortality- 4.1. By-catch-4.1.1.5. Poisoning /use of insecticides against insects in forest and rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /electrocuted birds were found underneath 15 KV power poles in Central Mongolia (Gombobaatar *et al.*, 2006; Harness &

Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.2. Predators /one of the prey species of steppe raptors including Saker Falcon (Gombobaatar, 2006/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 8.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

238. Scientific Name: *Aegolius funereus*

Species Authority: (Linnaeus, 1758)

Common Names: Boreal Owl or Tengmalm's Owl (English), Savagt arian or savagt uuli (Mongolian)

Subspecies in Mongolia: *A. f. pallens*; *A. f. sibiricus* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (1999) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Saint Pierre and Miquelon, Spain, United Kingdom, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Russian Federation, Armenia, Kazakhstan, Tajikistan, India, Kyrgyzstan, China, Mongolia, Japan.

Regional Distribution: This species nests at Bulgan River (Baruunkhurai Depression); Yolt River (Mongol-Altai Mountain Range); Khangai, Hövsgöl and Hentii Mountain Ranges; Herlen-Ulz River basins; Mongol Daguur Steppe; Khalkh and Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region) (Bold, 1965; Bold, 1969; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2008 & 2010).

Population: The global population consists of 1,700,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-

July. It inhabits woodlands, usually in conifers, nesting in tree holes, natural cavities and old holes of Great Spotted and Black Woodpeckers, rarely old nests of other tree-nesting birds in coniferous and mixed forest in mountain taiga, forest steppe and valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The female usually lays 3-6, sometimes 10 eggs of moderately glossy white colour. Number of eggs depends on density of prey species. Parents incubate the eggs for 26-36 days. Young hatch at c.1 day intervals and vary in size. The female broods the young for the first 3 weeks. Young leave nest at c. 30-36 days, occasionally longer. They prey on small rodents (voles, mice etc.), shrews, and small birds. In winter, it caches food in holes in tree. Its flight is swift, slightly wavy and it hunts from perch or in flight.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. near forest); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. in winter).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/-6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in some breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 10.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

239. Scientific Name: *Asio otus*

Species Authority: (Linnaeus, 1758)

Common Names: Long-eared Owl (English), Sooton guivanga or yavlig uuli (Mongolian)

Subspecies in Mongolia: *A. o. otus* (see Howard & Moore (1994) and del Hoyo *et al.* (1999) for further details)

Synonyms: *Strix otus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Mexico, Cuba, Saint Pierre and Miquelon, Bermuda, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, China, Nepal, Mongolia, Bhutan, Myanmar, Lao People's Democratic Republic, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Khoton, Khorgon, Achit Lakes and Khovd and Bulgan Rivers (Mongol-Altai Mountain Range); north-western Uvs Lake and Tes River (Great Lakes Depression); Tamir, Khanui and upper Orkhon Rivers and Tarvagatai-Bulnai Mountains Range (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Shishgid, Dood Lake wetlands (Darkhad Depression); Orkhon, Selenge, Eg, Kharaa Rivers (Orkhon-Selenge River basins); upper Tuul, Terelj, Onon, Balj, Huder, Bulnai Rivers and Herlen Bayan Ulaan, Bogd Khaan Uul Mountains (Hentii Mountain Range); Ulz, Herlen Rivers and lakes in Mongol Daguur Steppe and Middle Khalkh Steppe; Buir Lake-Khalkh River-Khyangan region; Bulgan River (Baruunkhurai Depression or Dzungariin Gobi). It is a partial migrant in the country. During the migration, the species occurs in the breeding areas and steppe, desert steppe and Gobi Desert of the Trans-Altai, Northern and Eastern Gobi (Kozlova, 1930; Bold, 1969; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tsevenmyadag & Bold, 2005; Tsevenmyadag *et al.*, 2005; Boldbaatar, 2008 Boldbaatar, 2010).

Population: The global population consists of 1,500,000 - 5,000,000 mature individuals. Global breeding and resident ranges are estimated at 28,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and a partial migrant. Most of the breeding individuals arrive in the breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. This species nests in tree holes, deserted nests of Carrion Crow, Black-billed Magpie and raptors in various types of forests including coniferous and mixed forests in mountain taiga forest, forest steppe, patchy woodland in the steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The female usually lays 4-5, rarely 3-8 eggs of moderately glossy white colour, finely pitted. Parents incubate the eggs for 25-30 days. The male hunts for rodents (voles, hamsters), pikas, hares, and occasionally small and medium sized birds and brings them to the female and chicks. The female broods and cares for the chicks in the nest. The young leave the nest at 23-24 days. Downy chicks sit and rest in areas with dense leaves at during the day. They are active at night. Most individuals leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. Few individuals winter in Mongolia depending on food availability supply in winter. On migration, individuals occur in forested areas and open steppe with rocks and dense bushes.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. in winter, 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people

shoot this species because of a confusion with Eurasian Eagle-owl/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest and rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds are regularly found underneath 15 KV and other types of high power electric lines in Mongolia (Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010; Gombobaatar *et al.*, 2011)/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/-6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs have been declining due to construction of private houses, resorts, and tourist camps in some breeding sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 10.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Strigiformes

Family: Strigidae

240. Scientific Name: *Asio flammeus*

Species Authority: (Pontoppidan, 1763)

Common Names: Short-eared Owl (English), Khulgar guivanga or guivanguu uuli (Mongolian)

Subspecies in Mongolia: *A. f. flammeus* (see Howard & Moore (1994); del Hoyo *et al.* (1999); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Canada, United States, Guatemala, Belize, Costa Rica, Cuba, Cayman Islands, Peru, Ecuador, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Bolivia, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Senegal, Mauritania, Guinea, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, France, Niger, Belgium, Netherlands, Norway, Luxembourg, Germany, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea,

Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Singapore, Hong Kong, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands, Marshall Islands.

Regional Distribution: This species breeds in Achit, and Uureg Lake valleys (Mongol-Altai Mountain Range); Khar-Us, Khar Lakes and Khovd, Uvs Lake, Tes River, Shargyn Gobi (Great Lakes Depression); Bööntsagaan and ALag Lakes (Valley of the Lakes); Khangai, Hövsgöl and Hentii Mountain Ranges; Ulz, Herlen and other river and lake valleys in Mongol Daguur Steppe and Middle Khalkh Steppe; Khalkh, Degee, Nömrög, Mogoit, Azarga, and Galdastai River valleys and Buir, Shavar, and Tashgain Tavan Lake valleys (Buir Lake-Khalkh River-Khyangan region). It is a partial migrant. On migration it is found in the breeding areas and forest steppe, steppe and mountain valleys of Middle Khalkh, Khangai, Hentii and Khalkh River-Buir Lake-Khyangan region (Kozlova, 1930; Tarasov, 1960; Bold, 1969; Mauersberger, 1980; Piechocki *et al.*, 1981; Rogachev *et al.*, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1997; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Boldbaatar, 2010).

Population: The global population consists of 2,000,000 mature individuals. Global breeding and resident ranges are estimated at 41,500,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder and a partial migrant. Most individuals arrive in breeding sites by mid-April-early May. Breeding season continues from May-July. This species nests in open country like river valleys, marsh land, and bogs with low bush and scrub (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is an unlined shallow hollow on the ground. The female usually lays 4-8, rarely 3 eggs of non-glossy or slightly glossy white colour. Parents incubate the eggs for 24-28 days. Female broods and feeds young, the male bringing food. Young leave nest at 12-17 days, but can fly c.10 days later. The male hunts for small rodents (vole, hamster), pika and small birds, occasionally insects. Most individuals leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.4. at edge of marshes); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.3., 5.4., 5.9.); 6. Rocky areas (on migration); 8. Desert (8.2.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /steppe and forest fires in spring and autumn dry seasons, occasionally summer fire in dry summers/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people shoot this species because of a confusion with Eurasian Eagle-owl/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest and rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /it is one of the potential threats/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in some breeding sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in CITES Appendix II. Approximately 7.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Caprimulgiformes

Family: Caprimulgidae

241. Scientific Name: *Caprimulgus indicus*

Species Authority: Latham, 1790

Common Names: Grey Nightjar, Jungle Nightjar or Highland Nightjar (English), Lags erguubor or lags erguu bor (Mongolian)

Subspecies in Mongolia: *C. i. jotaka* (see Howard & Moore (1994); del Hoyo *et al.* (1999); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Russian Federation, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Cambodia, Brunei Darussalam, Hong Kong, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau.

Regional Distribution: This species breeds in the valleys of Onon, Balj, and Ulz Rivers (Mongol Daguur Steppe) through southern Hentii to Tuul, Orkhon, Selenge, and Eg River valleys and along the country border to Northern Hentii, and Khalkh and Nömrög River valleys and Ih Khyangan Mountain range. It migrates through the breeding areas and Orkhon-Selenge River basins, Mongol Daguur Steppe and Middle Khalkh Steppe (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2005a).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding begins in late May-early June. Distribution limits of European Nightjars are unknown due to lack of information and data for the species. It breeds in open areas of litter-covered ground and taller cover in open woodland, edge, young plantations, sand dunes and exceptionally on beaches. It nests on the ground with gravel, fallen leaves and branches in open pine forest with sandy or sparsely vegetated soils near coniferous forest in forest steppe, steppe and river valleys (Gombobaatar, 2012). The nest is a slightly scraped hollow, usually near to a piece of dead wood which may function as a marker. The female usually lays 2 moderately glossy, white or creamy eggs with yellowish-brown or sometimes dark brown blotches and spots. Both sexes incubate the eggs for 18-20 days. Both parent brood and care for the young. The young can fly at 16-20 days. They sit immobile on a tree branch or on the ground at day time. At dark, they fly quietly in open spaces (forest clearings, field and meadows) or over water, feeding on flying insects, including moths, mosquitoes and others caught in flight. They occur singly or in pairs, in small flocks during migration. They leave the breeding site for wintering

grounds by late August-early September, depending on food availability and air temperature.

Habitat Type: 1. Forest (1.4. in forest steppe zone); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.8. only for hunting); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons /; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/ -4.2.2. Vehicle collision /fast driving cars hit them very often in eastern breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Caprimulgiformes

Family: Caprimulgidae

242. Scientific Name: *Caprimulgus europaeus*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Nightjar, European Nightjar or Nightjar (English), Öрниин аргуубор or öрниин аргуу бор (Mongolian)

Subspecies in Mongolia: *C. e. sarudnyi*, *C. e. dementievi*, *C. e. plumipes* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (1999) for further details)

Synonyms: *Caprimulgus europaea* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Iceland, Senegal, Mauritania, Gambia, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Gibraltar, France, Ghana, Niger, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic,

Slovenia, Poland, Malta, Croatia, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Estonia, Belarus, Egypt, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Tanzania, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Mongolia.

Regional Distribution: This species breeds in Achit and Dayan Lake valleys (Mongol-Altai Mountain Range); Great Lakes Depression; Baruunkhurai Depression; Khangai, Hövsgöl and eastern Hentii Mountain Ranges (except for alpine, subalpine zone, dense forest); Orkhon-Selenge River basins, east to upper Onon River valley. It migrates through the breeding areas and Valley of the Lakes, Middle Khalkh Steppe and Dzungariin Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 2,000,000 - 6,000,000 mature individuals. Global breeding and resident ranges are estimated at 19,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most migrants arrives the breeding sites by late April-early May, depending on weather conditions at breeding and wintering grounds. Breeding begins in late May-early June. Breeding pairs breed in open areas with soft soil, dense bushes and forest edge with taller cover, also young plantations and steppe mountain slopes in river valley with pine forest. They nest on the ground with gravel, soft sands, branches and dried leaves in mountain forest, forest steppe, thickets on edges of river valleys, desert steppe, mountain slopes with tall bushes, and open river valleys close to forest and mountain valleys with dry sandy soil and bushes (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a shallow scrape and located usually near to a piece of dead wood. The female usually lays 2 eggs of slightly glossy white colour with yellowish-brown or dark brownish spots and blotches. Both adults incubate the eggs for 17-18 days and cares for them. Young hatch at intervals of c. 1-2 days. The young can fly at 16-18 days and live independently at 31-34 days. According to Harrison (1975), with first brood male takes over after c.2 weeks while female begins a second brood. They feed on flying insects such as moths, mosquitoes and others in flight. It migrates singly or in small numbers, leaving the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4. in forest steppe zone); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.8. only for hunting); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons /; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/ -4.2.2. Vehicle collision /fast driving cars hit them very often in eastern breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance-10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of

private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Apodiformes

Family: Apodidae

243. Scientific Name: *Hirundapus caudacutus*

Species Authority: (Latham, 1801)

Common Names: White-throated Needletail, White-throated Needletailed Swift or White-throated Spinetailed Swift (English), Oin morinuraatsai or oin uraatsai (Mongolian)

Subspecies in Mongolia: *H. c. caudacutus* (see Howard & Moore (1994) and Dawaa *et al.* (1994) for further details)

Synonyms: *Hirundapus caudacuta* Latham, 1801

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Russian Federation, Pakistan, India, China, Nepal, Mongolia, Bhutan, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Brunei Darussalam, Australia, Democratic People's Republic of Korea, Republic of Korea, Japan, New Zealand. It is considered vagrant in Ireland, Spain, United Kingdom, Norway, Malta, Finland, Kazakhstan, Seychelles, Mauritius, Maldives, Bangladesh, Myanmar, New Caledonia, and Fiji.

Regional Distribution: This species breeds at Hövsgöl Mountain Range, Khangai and Hentii Mountain Ranges, east to upper Onon River (Binder sum, Hentii province), Orkhon–Selenge Rivers Basins, Uur, Zelter and Tarvagatai rivers. The species occurs in the breeding areas and Great Lakes Depression and Gobi (Trans-Altai-, Alashani-, Northern and Eastern Gobi) on migration (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 6,140,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in breeding sites by late April-early May. Breeding continues from May-July. They nest in rock crevices in cliffs or hollow trees in mountain forested areas (Bold *et al.*, 2005). Breeding biology is poorly known in Mongolia. Female lays 2-3 eggs. Both adults feed the young. They feed on flying insects in flight. They leave their breeding site for wintering grounds by mid August-late August, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 6. Rocky areas (near forest).

Dominant Threats: 1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1.

Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest /; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism / number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Apodiformes

Family: Apodidae

244. Scientific Name: *Apus apus*

Species Authority: (Linnaeus, 1758)

Common Names: Common Swift, Swift, Black Swift or Eurasian Swift (English), Khuryn uraatsai (Mongolian)

Subspecies in Mongolia: *A. a. apus*, *A. a. pekinensis* (see Baker (1993); Howard & Moore (1994); del Hoyo *et al.* (1999) for further details)

Synonyms: *Hirundo apus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Saint Pierre and Miquelon, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Nepal, Mongolia, Hong Kong.

Regional Distribution: This species breeds at Aчит, Uureg Lakes (Mongol-Altai Mountain Range), east to Great Lakes Depression, through Khangai and Hentii Mountain Ranges, further to Middle Khalkh

Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, and Buir Lake-Khalkh River-Khyangan region; from the northern country border across Orkhon-Selenge River basins, Hövsgöl Mountain Ranges, south to Great Lakes Depression, Valley of the Lakes, Baruunkhurai Depression and the Gobi (Trans-Altai, Alashani, Northern and Eastern Gobi). It migrates through the breeding areas and all different Gobi Deserts to the south (Potanin, 1883; Molleson, 1906; Tugarinov, 1929; Kozlova, 1930; Tugarinov, 1932; Kozlova, 1932; Sushkin, 1938; Tarasov, 1960; Bold, 1969; Fischer, 1970; Kozlova, 1975; Kleinstäuber & Succow, 1978; Potapov, 1980; Mauersberger, 1980; Piechocki *et al.*, 1981; Mauersberger *et al.*, 1982; Rogacheva, 1988; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Stephan, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Sumiya, 2002; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 40,000,000 - 200,000,000 mature individuals. Global breeding and resident ranges are estimated at 24,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in breeding sites by early-mid-May, depending on weather conditions. Breeding season continues from May-July. Breeding birds nest in colonies, in crevices of cliffs and rocks, under roofs of buildings, and in tree holes in mountain forests, forest steppe, plains, desert steppe, river valleys, towns and villages in valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a collection of stems, leaves and other plant debris and feathers, collected while blown about in the air. These are stuck together with saliva to form a shallow cup, usually on a ledge. Female lays 3, sometimes 2, rarely 4 eggs of a non-glossy white colour. Eggs are laid at 2-3-day intervals. The female incubates the eggs for 19-20 days. Both parents feed the young on insects held in a ball in throat. They can fly in 5-8 weeks. The young appear fully independent of the adults once they fly. They feed on flying insects such as flies, mosquitoes, moths, and others in flight. They leave the breeding site for wintering grounds by mid-late August, depending on food availability and air temperature. On migration, they occur in loose flocks of up to 30 individuals in Mongolia.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration and feeding); 4. Grassland (4.4. on migration and feeding); 5. Wetlands (5.1.-5.9. only on migration and feeding); 6. Rocky areas; 7. Caves and Subterranean Habitats (7.1.); 11. Artificial - Terrestrial (11.3., 11.4. as feeding area, 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons /; 4. Accidental mortality-4.1. By-catch -4.1.1. Fisheries-related -4.1.1.3. Entanglement /nestlings and fledglings entangle with fishing lines in the nest near fish harvesting areas/-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/-6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics-8.2. Predators /Domestic cats, Eurasian Eagle-owl and Saker Falcons prey upon them (Tumurbat *et al.*, 1007&2009; Gombobaatar, 2006)/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs have been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites. Nesting sites at old buildings in the centre of towns and cities are destroyed by construction workers/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Apodiformes

Family: Apodidae

245. Scientific Name: *Apus pacificus*

Species Authority: (Latham, 1802)

Common Names: Fork-tailed Swift or Pacific Swift (English), Khondloitsagaan uraatsai or morin uraatsai (Mongolian)

Subspecies in Mongolia: *A. p. pacificus* (see Howard & Moore (1994) and del Hoyo *et al.* (1999) for further details)

Synonyms: *Hirundo pacifica* (Latham, 1802)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its wide distribution and common occurrence across Mongolia. Further research is needed into population size and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, United Kingdom, Russian Federation, Kazakhstan, Seychelles, Pakistan, India, Maldives, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea, Northern Mariana Islands, Marshall Islands, New Zealand.

Regional Distribution: This species breeds at Achit, Uureg Lakes and Yolt, Khujirt rivers and mountains with altitudes 2700 m asl (Mongol-Altai) and Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers, Khar-Us, Khar, Dörgön, Khyargas, and Airag Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); Khan Höhii, Tarvagatai and Bulnai Mountain Ranges, upper Orkhon Rivers and Sangiin Dalai, and Ögii Lakes (Khangai Mountain Range); Tui and Baidrag Rivers (Southern Khangai Plateau); Hövsgöl Mountain Ranges including Darkhad Depression; lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins) and upper Tuul, Terelj, Onon, and Balj Rivers (Hentii Mountain Range). It migrates through the breeding areas, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression and Gobi (Trans-Altai, Alashani, Northern and Eastern Gobi) (Molleson, 1906; Kozlova, 1930; Tugarinov, 1932; Tarasov, 1960; Gagina, 1960; Kleinstäuber and Succow, 1978; Mauersberger, 1980; Piechocki *et al.*, 1981; Mauersberger, 1982; Stephan, 1988; Rogacheva, 1988; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Smirenskii & Sumiya, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most of individuals arrive in breeding sites by early May. Breeding season continues from May-July. They nest in colonies, in crevices and cracks of cliffs and rocks and under roofs of buildings in mountain forest, forest steppe, plains, desert steppe, river valleys, towns and villages in regions and valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010;

Gombobaatar, 2012). The nest is built of stems, leaves and other plant materials, and feathers, collected in the air. These are stuck together with saliva to form a shallow cup. The female lays 3-4 eggs of a non-glossy white colour. Both adults feed the young on insects held in a ball in throat. They catch flying insects such as flies, mosquitoes, moths, and others in the air while they are flying in flocks. The young live independently once they fly. They leave the breeding site for wintering grounds by mid -late August, depending on food availability and air temperature. They are very sensitive to air temperature.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration and feeding); 4. Grassland (4.4. on migration and feeding); 5. Wetlands (5.1.-5.9. only on migration and feeding); 6. Rocky areas; 7. Caves and Subterranean Habitats (7.1.); 11. Artificial – Terrestrial (11.3., 11.4. as feeding area, 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging-1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-4.1. By-catch -4.1.1. Fisheries-related -4.1.1.3. Entanglement /nestlings and fledglings entangle with fishing lines in the nest near fish harvesting areas/ 1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/ -4.2.2. Vehicle collision /fast driving cars hit them very often in eastern breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics-8.2. Predators /domestic cats, Eurasian Eagle-owl and Saker Falcons prey upon them (Tumurbat *et al.*, 1007&2009; Gombobaatar, 2006)/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites. Nesting sites at old buildings in towns and cities destroyed by repairmen and construction workers/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Coraciiformes

Family: Coraciidae

246. Scientific Name: *Eurystomus orientalis*

Species Authority: (Linnaeus, 1766)

Common Names: Asian Dollarbird, Oriental Dollarbird, Broad-billed Roller or Dollar Bird (English), Dornyn erdeniinshuvuu (Mongolian)

Subspecies in Mongolia: *E. o. calonyx* (see Flint *et al.* (1984); Mackinnon & Phillips (2000); Wild Bird Society of Japan (2000); Gombobaatar *et al.* (2006) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Russian Federation, India, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Papua New Guinea, Micronesia, Solomon Islands, New Zealand.

Regional Distribution: S.Gombobaatar (NUM & MOS) and his colleagues observed and photographed a single adult bird passing through Caragana steppe at Darkhan sum of Hentii province (at 46°35'18.12"N; 109°27'16.31"E") on 17 June, 2006 (Gombobaatar *et al.*, 2007).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 13,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species was observed only once at Darkhan sum of Hentii province during the breeding season (Gombobaatar *et al.*, 2007). We do not know whether the species passes through Mongolia every year or some individuals accidentally lost the main migration route and were found in the steppe. The habitat where the bird was found in Mongolia is neither typical breeding nor feeding habitat. Since this record, this species has not been recorded in Mongolia.

Habitat Type: Potential habitats are 1. Forest (1.4.); 4. Grassland (4.4. on migration); 8. Desert (8.2. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging-1.3.3.3. Clear-cutting /logging near nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/; 4. Accidental mortality- 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters--7.3. Temperature extremes; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species. However, they may migrate through protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Coraciiformes

Family: Alcedinidae

247. Scientific Name: *Halcyon pileata*

Species Authority: (Boddaert, 1783)

Common Names: Black-capped Kingfisher (English), kharmagnait khaluu (Mongolian)

Synonyms: *Alcedo pileata* (Boddaert, 1783)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Russian Federation, Pakistan, India, China, Sri Lanka, Nepal, Bangladesh, Myanmar,

Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: S.Gombobaatar, B.Munkhzaya (NUM & MOS) and E.Potapov found a dead bird under *Amygdalus pedunculata* bushes at Baga Gazar Chuluu of Delgertsogt sum in Dundgobi province on 15 June, 2002 (Gombobaatar *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. It prefers the banks of large rivers, estuaries and mangroves with plenty of small fishes. It perches over rivers on overhanging branches (Mackinnon & Phillipps, 2000). The habitat where a dead bird was found in Mongolia was completely different than these breeding habitats. S.Gombobaatar and B.Munkhzaya, field biologists of the Mongolian Ornithological Society found a dead bird at Baga Gazar Chuluu in Delgertsogt sum of Dundgobi province on 15 June 2002. The Baga Gazar Chuluu is located in the extreme dry steppe with *Caragana* spp. bushes in Central Mongolia. The place of the dead bird found is surrounded by hills with rocks and cliffs at 7 to 15 m high. There was no river or lake near this area. However, the Sum Huh Burd, an isolated steppe salt lake with reed beds, is located 30 km to the west of the area. This unsuitable habitat for the species was presumably the main reason for the individual's death. The distance between the location of the dead bird in Mongolia and the northern limit of its World distribution was c. 1200 km. We presume that while this dead individual was migrating with other migratory birds heading to the north, it lost its migration route and reached Central Mongolia, where both starvation and drought were potential causes of death for the individual. This species feeds on small fishes, larva of aquatic amphibians and aquatic insects (Mackinnon & Phillipps, 2000).

Habitat Type: Potential habitats are 4. Grassland (4.4. only on migration); 5. Wetlands (5.1. -5.8.); 6. Rocky areas (found in Mongolia).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals); 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /according to Gombobaatar *et al.* (2005), the reason for death of the individual found in the dry desert steppe in the south of Mongolia, was lack of food and high temperature/; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species. However, this species might pass through protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Coraciiformes

Family: Alcedinidae

248. Scientific Name: *Alcedo atthis*

Species Authority: (Linnaeus, 1758)

Common Names: Common Kingfisher, Kingfisher or River Kingfisher (English), Nomin shogshir or nokhoi shogshir (Mongolian)

Subspecies in Mongolia: *A. a. bengalensis* (see Wild Bird Society of Japan (2000) and del Hoyo *et al.* (2001) for further details)

Synonyms: *Gracula atthis* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, mining and drought, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Morocco, Ireland, Portugal, Algeria, United Kingdom, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Papua New Guinea.

Regional Distribution: This species breeds at Achit Lake (Mongol-Altai Mountain Range); Tes, Khovd, and Buyant Rivers (Great Lakes Depression); Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai and Herlen Rivers (Hentii Mountain Range); Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, and Azarga Rivers and Buir Lake (Buir Lake-Khalkh River-Khyangan region) and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas and has been observed at Bööntsagaan Lake (Valley of the Lakes) on migration (Kozlova, 1930; Tugarinov, 1932; Tarasov, 1960; Mauersberger, 1980; Piechocki *et al.*, 1981; Smirenskii & Sumiya, 1991; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 600,000 mature individuals. Global breeding and resident ranges are estimated at 24,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding individuals arrive in breeding and summering sites by late April-early May. Breeding season continues from May-July. It nests in holes and crevices on river banks, lake shores, and streams with fishes in mountain forest, forest steppe and valleys of fresh water rivers and lakes (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a tunnel about 30cm-1 m long. The nest does not have nest material, but becomes lined with cast-up fish bones. The female usually lays 6-7, sometimes 4-8 eggs with highly glossy white colour. Both adults incubate the eggs for 19-21 days. Both parents care for and feed the young for 23-27 days. In the non-breeding season, they perch on trees and tree branches, rarely on poles near fresh water rivers, lakes and marshes with small fishes, and hunt these from perches. On migration, they follow wetlands and rest in tall grasses in the steppe near temporary and permanent wetlands. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4. near fresh water rivers and lakes); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.8., 5.9. on migration; 5.13.-5.17. on migration); 12. Artificial – Aquatic (12.2., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought. Livestock destroy breeding sites of the breeding pairs nest in holes of the sandy precipice and high banks in valleys of the rivers in Eastern and Northern Mongolia/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities

and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites near fresh water rivers and lakes/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest and forest steppe/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics-8.2. Predators /Eurasian Eagle-owl and Saker Falcons prey upon them/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Coraciiformes

Family: Meropidae

249. Scientific Name: *Merops apiaster*

Species Authority: Linnaeus, 1758

Common Names: European Bee-eater (English), Sharga balch or shargal balch shuvuu (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uuganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Mali, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Bahrain, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Czech Republic, Slovenia, Chad, Poland, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Madagascar, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China.

Regional Distribution: German and Mongolian biologists recorded a single bird at Yarantai in Bulgan River of Khovd province, undated (Dawaa *et al.*, 1994). A second individual was observed at Dzungariin Gobi in May (A. Bräunlich pers. comm.).

Population: The global population consists of 3,000,000 - 10,000,000 mature individuals. Global breeding and resident ranges are estimated at 11,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant species. There are only a few records within Mongolia. However, the species presumably passes through western Mongolia by early May (on spring migration) and late August (on autumn migration) the same as other migrants. It was found in open areas of river valleys between mountains. They nest in colonies in burrows dug into overhanging precipices, and feeds on large insects caught in flight (Mackinnon & Phillipps, 2000).

Habitat Type: Potential habitats are 1. Forest (1.4.); 4. Grassland (4.4. on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging near fresh water rivers and lakes/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement /construction of buildings for industrial purposes, and other buildings/, 1.7. Fires /forest fires in spring and autumn/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.1.5. Poisoning /use of insecticides against insects in forest and forest steppe/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /cold and strong wind/ 10. Human disturbance -10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, this species might pass through protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Upupiformes

Family: Upupidae

250. Scientific Name: *Upupa epops*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Hoopoe or Hoopoe (English), Бөвөөлжин өвөөлж or өвөөлж (Mongolian)

Subspecies in Mongolia: *U. e. epops*, *U. e. saturate* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2001) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Bayarkhuu (MNET, Mongolia), S.Butchart (BI, UK), Z.Uganbaatar (NUM, Mongolia), B.Odkhuu (CIA, Mongolia), and T.Batbaatar (HNP & MOS, Mongolia).

Global Distribution: United States, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, iger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia,

Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds in Mongol-Altai and Gobi-Altai Mountain Ranges (except for alpine, subalpine zones and wet meadows); Great Lakes Depression (except for reed beds and lakes); Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest, alpine zone); Orkhon-Selenge River basins; Mongol Daguur Steppe and Middle Khalkh Steppe; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes; Baruunkhurai Depression and the Gobi (Trans-Altai, Northern and Eastern Gobi). It migrates through breeding areas and almost all natural zones in Mongolia including oases in the Gobi Desert (Potanin, 1883; Molleson, 1906; Tugarinov, 1929; Kozlova, 1930; Tugarinov, 1932; Kozlova, 1932; Sushkin, 1938; Tarasov, 1960; Bold, 1969; Fischer, 1970; Kozlova, 1975; Kleinstäuber and Succow, 1978; Potapov, 1980; Mauersberger, 1980; Piechocki *et al.*, 1981; Mauersberger *et al.*, 1982; Rogacheva, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stephan, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, (2002); Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 5,000,000 mature individuals. Global breeding and resident ranges are estimated at 46,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives in breeding and summering sites by late April-early May. Breeding season continues from May-July. Breeding pairs nest in tree holes, crevices of cliffs and rocks, and cracks and crevices of man-made structures in high mountains, mountain taiga forest, forest steppe, plains, desert steppe, Gobi Desert and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a cavity, usually unlined, but at times with sparse lining of plants, feathers, wool and droppings. The female usually lays 5-8 eggs of a non-glossy, greyish, yellowish or olive, or more greenish or brownish colour. Egg pores may show as fine white pits. Parents incubate the eggs for 16-19 days. Young hatch at intervals and differ in size. The young are brooded by the female when small, the male bringing food. Later both adults bring food. The young leave nest at 20-27 days and are still fed for a time by the adults. They migrate singly and in small flocks consisting of 2-4 individuals. They feed on insects and their larvae, spiders, earthworms, and other terrestrial invertebrates. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4.); 6. Rocky areas; 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities and pollution of chemicals), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence-1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons /; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people accidentally shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /electrocuted birds very often

found underneath 15 KV and junctions of 10 KV power lines in the steppe (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars hit them very often at night/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance-10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

251. Scientific Name: *Jynx torquilla*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Wryneck or Wryneck (English), Kholtson goyotuul or goyotuul (Mongolian)

Subspecies in Mongolia: *J. t. chinensis*, *J. t. torquilla* (see Wild Bird Society of Japan (2000) and del Hoyo *et al.* (2002) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, China, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Khoton, Khorgon Lakes and Khovd River; Kharkhiraa

and Turgen Mountains (Mongol-Altai Mountain Range); along Tes River (Great Lakes Depression); Khan Höhii and Tarvagatai-Bulnai Mountains ranges (Khangai Mountain Range); Hövsgöl Lake, and Uilgan and Eg River valleys, Darkhad Depression (Hövsgöl Mountain Range); Zelter, Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); Ulz River basin; Khalkh, Degee, Nömrög, Azarga Rivers and Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region) and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas and steppe, desert steppe and high mountains in Gurvansaikhan Mountain (Gobi-Altai Mountain Range), and Saxaul forest in Trans-Altai and Northern Gobi (Kozlova, 1930; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 5,000,000 - 15,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs nest in tree-holes and stumps in deciduous, coniferous and mixed forests in mountain taiga forest, forest steppe, river valleys and patchy woodland in plains and in regions and valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The female usually lays 5-10 eggs of a non-glossy white colour. Both sexes but mainly female incubates the eggs for 12-14 days. Both adults care for and feed the young. They feed on ants and ant-pupae, brought in bill and usually visible. Young leave nest at 19- 21 days. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. They migrate singly or in small flocks consisting of 3-7 individuals. During spring and autumn migrations, they occur in dry steppe and Gobi Desert with scattered trees, bushes, and planted trees.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. with scattered trees on migration); 11. Artificial – Terrestrial (11.3.-11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /collision and electrocution -potential threats/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local people/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

252. Scientific Name: *Dendrocopos minor*

Species Authority: (Linnaeus, 1758)

Common Names: Lesser Spotted Woodpecker (English), Tsookhor tonshuur or бага алэг тоншуул (Mongolian)

Subspecies in Mongolia: *D. m. amurensis*, *D. m. kamtschatkensis* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2002) for further details)

Synonyms: *Picoides minor* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Portugal, Spain, Algeria, United Kingdom, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, China, Mongolia, Democratic People's Republic of Korea, Japan.

Regional Distribution: This species breeds at Khovd River, and Kharkhiraa and Turgen Mountains (Mongol-Altai); Tes River (Great Lakes Depression); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake and Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, and Bulnai Rivers (Hentii Mountain Range); patchy woodland in Ulz and Herlen Rivers (Mongol Daguur Steppe and Middle Khalkh Steppe); Degee, Nömrög Rivers and Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930; Sergelen, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). A single bird was recorded at Ih Bulag of Khan Bogd sum of Ömnögobi province in April, 2009 (B. Bayarjargal and B.Nyambayar pers. comm.)

Population: The global population consists of 3,000,000 - 15,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. Breeding pairs nest in tree holes in coniferous, deciduous and mixed forest in mountain taiga, forest steppe, gardens and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The entrance nest hole in a tree is c. 3.5-4 cm diameter, with tunnel curving down to an elongated chamber c. 20-22 cm high, 37-38 cm wide (Harrison, 1975). The cavity is unlined. The female usually lays 4-6, sometimes 3-8 eggs of glossy white colour. Both sexes incubate the eggs for 14 days and the male usually sits at night. Both parents care for and feed the young on terrestrial insects and their larvae. They bring the food in the bill. The young leave the nest at c. 21 days. They move down to forest steppe, river valley, and planted trees in dry steppe and in towns and cities during seasonal movements near forest.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. during seasonal movements); 11. Artificial – Terrestrial (11.3.-11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons burn nesting trees/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade / people shoot this species for use of tongue/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /collision and electrocution -potential threats/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution / noise from industry, transport and local people/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

253. Scientific Name: *Dendrocopos hyperythrus*

Species Authority: (Vigors, 1831)

Common Names: Rufous-bellied Woodpecker (English), Borhevliit tonshuur (Mongolian)

Subspecies in Mongolia: *D. h. subrufinus* (see del Hoyo *et al.* (2002) for further details)

Synonyms: *Picoides hyperythrus* (Vigors, 1831)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Pakistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Viet Nam, Cambodia, Hong Kong, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: R.Reading (Denver Zoo, USA) and his team documented a bird at Ih Nart Protected Area of Dornogobi province in September, 2005 (Reading *et al.*, 2006; Tseveenmyadag & Bold, 2006). S.Gombobaatar (NUM & MOS), Reuven Yosef (International Birding and Research Centre in Eilat, Israel) and Lynette Mitchell, UK photographed a single bird feeding on an old poplar tree together with Lesser Spotted Woodpecker, Great Spotted Woodpecker and Three-toed Woodpecker in Tuul River valley at Uubulan area of Erdene sum in Töv province (47°53'35.9"N; 107°37'03.7"E) on 18 September, 2007 (S.Gombobaatar, R.Yosef and L.Mitchell's pers. comm. and photographs).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species was recorded only two times in different regions of Mongolia. According to S.Gombobaatar's documentation in 2007, it is a possible breeding species in Hentii Mountain range. It was found on a poplar trunk in mixed forest (old poplar, larch, birch, willow, and fruit trees) in Terelj River valley. They feed on insects and their larvae.

Potential habitats are 1. Forest (1.1., 1.4.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons burn nesting trees/; 4. Accidental mortality-4.1.1.5. Poisoning /use of insecticides against insects in forest/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. The species migrates through some protected areas and Important Bird Areas for the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

254. Scientific Name: *Dendrocopos leucotos*

Species Authority: (Bechstein, 1803)

Common Names: White-backed Woodpecker (English), Khondloitsagaan tonshuur or khondloi tsagaan tonshuul (Mongolian)

Subspecies in Mongolia: *D. l. leucotos* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2002) for further details)

Synonyms: *Picoides leucotos* (Bechstein, 1803)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Spain, Belgium, Netherlands, Norway, Switzerland, Italy, Liechtenstein, Austria, Sweden, Slovenia, Poland, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Latvia, Lithuania, Ukraine, Bulgaria, Belarus, Turkey, Moldova, Russian Federation, Armenia, Azerbaijan, Kazakhstan, China, Mongolia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Aчит Lake, Khovd, Bulgan, Uliastai Rivers and Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake and Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai and Herlen Rivers (Hentii Mountain Range); patchy woodland in Ulz River (Mongol Daguur Steppe); Degee, Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 1,000,000 - 7,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. It nests in tree holes and cavity in coniferous, deciduous and mixed forest in mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a cavity bored in rotten wood of a tree-trunk or large branch. The female usually lays 3-6 eggs of glossy white colour. Both sexes incubate the eggs for 14-16 days and feed young on insects. The young leave the nest at c. 27-28 days. In breeding season, they eat insects and seeds of coniferous trees in winter. They move down to river valleys, forest steppe, and gardens in towns and cities in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. during seasonal movements); 11. Artificial – Terrestrial (11.3.-11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging-1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons burn nesting trees/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade / people shoot this species for use of tongue/; 4. Accidental mortality-4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /collision and electrocution -potential threats/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local people/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

255. Scientific Name: *Dendrocopos major*

Species Authority: (Linnaeus, 1758)

Common Names: Great Spotted Woodpecker (English), Alag tonshuur or ih alag tonshuul (Mongolian)

Subspecies in Mongolia: *D. m. brevirostris* (see Howard & Moore (1994) and del Hoyo *et al.* (2002) for further details)

Synonyms: *Picoides major* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, Iceland, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, India, China, Mongolia, Myanmar, Lao People's Democratic Republic, Viet Nam, Hong Kong, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Yolt and Khovd Rivers and Kharkhiraa and Turgen Mountains (Mongol-Altai); Tes River and NW Uvs Lake (Great Lakes Depression); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake valley, Darkhad Depression and Eg River (Hövsgöl Mountain Range); Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); patchy woodland in Ulz River (Mongol Daguur Steppe); Degee, Nömrög Rivers and Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region); Bulgan River (Baruunkhurai Depression) (Kozlova, 1930; Sergelen, 1986; Sumiya & Skryabin, 1989, Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). It was recently found on rocky mountains, cliffs and fences of cattle shelters in desert steppe in Töv, Dundgobi and Hentii, Dornod and Sukhbaatar provinces and Khan Bogd Mountain during seasonal movements (S. Gombobaatar pers. comm. and photographs).

Population: The global population consists of 75,000,000 - 200,000,000 mature individuals. Global breeding and resident ranges are estimated at 24,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: It is a resident breeder. Breeding season continues from May-July. Breeding pairs nest in tree holes in coniferous and deciduous trees in mixed forest in mountain taiga, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Both birds excavate nest trees. The nest is an elongated unlined cavity. The entrance is c. 5-6 cm across and the cavity is 12 cm in depth (Harrison, 1975). The female usually lays 4-7 eggs of glossy white colour. Both

sexes, but mainly female, incubate the eggs for 16 days. Both parents care for and feed the young on tree insects and their larvae, carrying the food in their bill. The young leave nest at 18-21 days. During seasonal movements, they occur in rocky mountains, river valleys and planted trees in dry steppe. They often visit gardens and planted trees in cities and towns in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. during seasonal movements); 6. Rocky areas (during seasonal movements); 11. Artificial – Terrestrial (11.3.-11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons burn nesting trees/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people shoot this species for use of tongue/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /collision and electrocution -potential threats/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local people/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

256. Scientific Name: *Picoides tridactylus*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Three-toed Woodpecker (English), Gurvankhumst ovuuna or gurvan khumst tonshuul (Mongolian)

Subspecies in Mongolia: *P. t. tridactylus* (see Howard & Moore (1994) and del Hoyo *et al.* (2002) for further details)

Synonyms: *Picus tridactylus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Spain, France, Norway, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Russian Federation, Kazakhstan, Democratic People's Republic of Korea, China, Mongolia, Japan.

Regional Distribution: This species breeds at Khovd, Khujirt, Bulgan Rivers and Kharkhira and Turgen Mountains (Mongol-Altai Mountain Range); Tes River (Great Lakes Depression); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake and Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range), Herlenbayan-Ulaan Mountain (Middle Khalkh Steppe); patchy woodland in Ulz River valley (Mongol Daguur Steppe); Degee, Nömrög Rivers and Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region) and Bulgan River (Baruunkhurai Depression) (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 5,000,000 - 50,000,000 mature individuals. Global breeding and resident ranges are estimated at 14,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. Breeding pairs nest in tree holes in old coniferous forest in mountain taiga, forest steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest hole is in a tree-trunk, bored in dead wood by the birds. The entrance is c. 2.5-3.5 cm, and cavity is c. 18-25 cm deep. The female usually lays 4-5, sometimes 3-6 eggs of moderately glossy white colour. Both sexes incubate the eggs for 12-14 days (Harrison, 1975). Both adults care for and feed the young on insects and their larvae. They bring the food in their bill. They move down to trees in forest steppe, river valleys and gardens of towns and cities in winter and during seasonal movements. Individuals feed on plant matter in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons burn nesting trees/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.1.5. Poisoning /use of insecticides against insects in forest/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local people/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

257. Scientific Name: *Dryocopus martius*

Species Authority: (Linnaeus, 1758)

Common Names: Black woodpecker (English), khar togshuurga or khar tonshuul (Mongolian)

Subspecies in Mongolia: *D. m. martius* (see del Hoyo *et al.* (2002) for further details)

Synonyms: *Picus martius* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Portugal, Spain, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Yolt and Khovd Rivers (Mongol-Altai Mountain Range); Khandgait and Tes Rivers (Great Lakes Depression); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake valley and Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); upper Ulz River ; Degee, Nömrög Rivers and Khyangan Mountains (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 5,000,000 - 15,000,000 mature individuals. Global breeding and resident ranges are estimated at 19,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. Breeding pairs nest in tree holes in deciduous and coniferous trees in deciduous and mixed forest in mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Both adults excavate nesting trees. The nest is a cavity, unlined or with a few wood chips. The entrance of the hole is 10-12 cm across and internal cavity is 20-22 cm wide. The female usually lays 4-6, sometimes 9 eggs of smooth and glossy white colour. Parents incubate the eggs for 12-14 days. Both adults feed young on regurgitated food. The young appear at entrance after 17-20 days, and leave at 24-28 days. Both sexes feed young on tree-living insects and their larvae. They move down to forest steppe and river valley, sometimes visiting planted trees in towns and cities during seasonal movements in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. during seasonal movements); 11. Artificial – Terrestrial (11.3.-11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons burn nesting trees/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people shoot this species for use of tongue/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /collision and electrocution -potential threats/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local people/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Piciformes

Family: Picidae

258. Scientific Name: *Picus canus*

Species Authority: Gmelin, 1788

Common Names: Grey-faced Woodpecker or Grey-headed Woodpecker (English), Буурал тоншуул (Mongolian)

Subspecies in Mongolia: *P. c. canus*, *P. c. yessoensis* (see Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2002) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Spain, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Liechtenstein, Austria, Sweden, Czech Republic, Slovenia, Poland, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Turkey, Moldova, Russian Federation, Kazakhstan, Pakistan, India, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Torkholig and Tes Rivers; Khangai, Hövsgöl and Hentii

Mountain Ranges; patchy woodland in Mongol Daguur Steppe and Middle Khalkh Steppe; Degee, Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 2,500,000 - 20,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. Breeding pairs nest in tree holes in deciduous and mixed forests in mountain taiga, forest steppe and valleys (Bold *et al.*, 2005; Gombobaatar, 2012). Both sexes excavate their nesting holes. The nest is a cavity bored into a tree-trunk and unlined except for wood-chips. Entrance hole c. 5-6 cm across, cavity c. 5 cm deep and 12-15 cm across (Harrison, 1975). The female usually lays 4-5 eggs of glossy white colour. Both adults incubate the eggs for 17-18 days. Both parents care for and feed young in the nest. They feed the young on regurgitated food. The young leave nest at 24-25 days. They feed on terrestrial arthropods and their larvae in trees. They move down to forest steppe and river valley forest during seasonal movement in winter. Sometimes it visits gardens in towns and cities in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 11. Artificial – Terrestrial (11.3.-11.5.).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /decrease in density of prey species associated with overgrazing and drought/, 1.3. Extraction-1.3.1. Mining (gold and other mining activities), 1.3.3. Wood- 1.3.3.1. Small-scale subsistence- 1.3.3.2. Selective logging-1.3.3.3. Clear-cutting /logging at nesting sites/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons burn nesting trees/; 3. Harvesting (hunting or gathering)-3.5. Cultural, scientific or leisure activities -3.5.1. Subsistence use or local trade /people accidentally shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /collision and electrocution -potential threats/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/-6.3.10. Noise pollution /noise from industry, transport and local people/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics-8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Laniidae

259. Scientific Name: *Lanius bucephalus*

Species Authority: Temminck & Schlegel, 1847

Common Names: Bull-headed Shrike (English), Bukhan dunkhai (Mongolian)

Subspecies in Mongolia: *L. b. bucephalus* (see Harris & Franklin (2000) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation, China, Viet Nam, Taiwan, Japan, Democratic People's Republic of Korea, Republic of Korea. It is considered vagrant in Hong Kong.

Regional Distribution: This species prefers open habitats with thickets and scattered bushes in desert steppe and mountain valleys. S.Gombobaatar photographed a male sitting on a willow tree NE of army checkpoint in the valley of Nömrög River on 21 August, 2007. The species might be breeding in this area. E.N.Kurochkin found a single bird in Saxaul forest in Ömnögobi province (Dawaa *et al.*, 1994).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 1,710,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. This species may breed in eastern Mongolia. It prefers open habitats such as dense young deciduous forest edges and woodland edges. It sits on a prominent perch, waiting for prey to pass by. It feeds mainly on insects such as beetles and crickets but also lizards. They migrate singly through eastern Mongolia by late April-early May (on spring migration) and by late August-early September (on autumn migration).

Habitat Type: Potential habitats are 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /habitat degradation by overgrazing of livestock/-1.3.3. Wood - 1.3.3.1. Small scale subsistence - 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging for local fuel use and constructing materials/, 1.7. Fires /forest and steppe fires may burn feeding habitats on migration/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/-6.3.10. Noise pollution /noise from industry, transport and local herders/; 8. Changes in native species dynamics- 8.2. Predators /potential predators -Saker Falcon, Northern Goshawk, and Eurasian Sparrow Hawk/ -8.3. Prey and food base /lack of food base/; 10. Human disturbance, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, the species migrates through some protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Laniidae

260. Scientific Name: *Lanius isabellinus*

Species Authority: Ehrenberg, 1833

Common Names: Rufous-tailed Shrike or Isabelline Shrike (English), Tolit dunkhai or ulbar suult dunkhai (Mongolian)

Subspecies in Mongolia: *L. i. isabellinus*, *L. i. speculigerus* (see Svensson (1992) and Harris & Franklin (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Senegal, Mauritania, Gambia, Mali, Ireland, United Kingdom, France, Belgium, Nigeria, Netherlands, Norway, Germany, Italy, Cameroon, Gabon, the Democratic Republic of the Congo, Sweden, Chad, Poland, Finland, Latvia, Sudan, Zambia, Egypt, Turkey, Rwanda, Tanzania, Uganda, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Eritrea, Iraq, Somalia, Djibouti, Yemen, Islamic Republic of Iran, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Nepal.

Regional Distribution: This species breeds at Buyant, Khovd Rivers, Achit Lake (Mongol-Altai Mountain Range); Mountain slopes and valleys (Gobi-Altai Mountain Range); from Northern Uvs Depression, south to Mongol-Altai mountains (Great Lakes Depression); Herlen- Ulz River basins, steppe mountains in Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Nömrög, Azarga Rivers and Buir Lake (Buir Lake-Khalkh River-Khyangan region); Valley of the Lakes; Bulgan River (Baruunkhurai Depression); Saxaul, elm trees and tall bushes in Trans-Altai, Northern and Eastern Gobi. It migrates through the breeding areas and open habitats with bushes and river valleys with young trees in the southern and south-eastern Hentii Mountain Range and Eastern Mongolian Plain (Kozlova, 1930; Tungalag, 1983; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Busching, 2004; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating birds arrive in breeding and summering sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding pairs build the nest in dense trees such as elm, poplar, birch and willow in scattered tall bushy open habitats in mountain steppe and high mountains, tall dense thickets and dense bushes with deciduous trees along river valleys and mountain valleys in steppe, bushy areas along the edges of mixed forest, and Saxaul forest in the Gobi in different natural zones and belts (high mountain, mountain forest, forest steppe, mountain steppe, desert steppe, Gobi Desert) and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). This species nests in comparatively more open and dry habitats than Brown Shrike. The nest is placed 0.3-1.8 m high in trees and bushes and covered by leaves and branches. The nest is a deep cup of dry grass, thin dry twigs, and rootlets, lined with grass, roots, wool, and hair. The female usually lays 5-6 eggs of slightly glossy white, tinged greenish or buffish colour with brown, light reddish-brown, olive buff or pale purplish- grey spots and small blotches. Both adults, but chiefly the female, incubate the eggs for 13-17 days. Both parents feed young on terrestrial insects such as crickets, grasshoppers, beetles, spiders, molluscs, young nestlings and fledglings of small passerines, and young small rodents. The young leave the nest at c. 12-16 days and live independently at c. 30-35 days. On migration, individuals occur singly or in pairs in areas with natural trees, bushes, tall vegetation, rocks, planted trees in towns and cities and human-made constructions such as buildings, cattle shelters and concrete wells in open habitats from taiga forest to Gobi Desert. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. on migration, 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3.

Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010), Eurasian Hobby and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Laniidae

261. Scientific Name: *Lanius cristatus*

Species Authority: Linnaeus, 1758

Common Names: Brown Shrike (English), Ukhaa dunkhai (Mongolian)

Subspecies in Mongolia: *L. c. cristatus*, *L. c. confuses* (see Howard & Moore (1994) and Harris & Franklin (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, United Kingdom, Denmark, Russian Federation, Kazakhstan, United Arab Emirates, India, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau.

Regional Distribution: This species breeds in Mönh Khairkhan Mountain (Khujirt gol), and Buyant and Khovd Rivers (Mongol-Altai Mountain Range); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range); and Khovd, the delta of Tes Nariin and Torkholig Rivers, and Uvs, Khar-Uus, and Khar Lakes (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest and very high altitudes); Orkhon-Selenge River basins; Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög and Azarga Rivers (Buir Lake-Khalkh River-Khyangan region) and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, open habitats with bushes, trees and rocky mountain slopes with bushes in Great Lakes Depression, Valley of the Lakes and the Gobi (Trans-Altai, Alashani, Northern and Eastern Gobi) (Sergelen, 1986; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003; Busching, 2004; Tseveenmyadag & Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating birds arrive in breeding sites by late April-early May. Breeding begins in late May-early June. Breeding habitats are dense tall bushes, birch and willow trees in open habitats with thickets, forest edges in mixed and coniferous forest, gardens and parks, scattered bushy habitats on mountain slopes, and tall bushes along river valleys in high mountains, mountain taiga forest, forest steppe, mountain steppe, desert steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). This species nests in dense bushes, young deciduous trees and thorny bushes placed in low parts of the trees and bushes. The nest is a bulky cup of dry grass, thin dry grasses and moss, lined with roots, wool, hair and feathers. The female usually lays 4-6 eggs of slightly glossy white, tinged greenish or buffish colour with light reddish-brown, olive buff or pale grey spots and small blotches. Both adults, but chiefly the female, incubate the eggs for 13-16 days. Both parents brood and feed young on terrestrial insects such as flies, butterflies, moth, caterpillars, dragonflies, crickets, grasshoppers, beetles, spiders, molluscs, young nestling and fledglings of small passerines, young small rodents and young amphibians. The young leave the nest at c. 14-16 days. On migration, individuals occur in areas with trees, bushes, tall plants, rocks, planted trees and human-made constructions such as buildings, cattle shelters and concrete wells in open habitats from taiga forest to Gobi Desert in Mongolia. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. on migration, 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of

habitat degradation and disturbance/, 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010), Eurasian Hobby, and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Laniidae

262. Scientific Name: *Lanius schach*

Species Authority: Linnaeus, 1758

Common Names: Long-tailed Shrike, Chestnut-rumped Shrike, Black-headed shrike or Rufous-backed Shrike (English), Alag dunkhai (Mongolian)

Subspecies in Mongolia: *L. s. erythronotus* (see Harris & Franklin (2000) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Israel, Islamic Republic of Iran, Kazakhstan, Oman, Turkmenistan, Pakistan, Tajikistan, India, Maldives, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Taiwan, Philippines, Japan, Papua New Guinea.

Regional Distribution: This species is found in clumps of bushes and trees in steppe and semi-desert. B.Stephan (German biologist) recorded a bird in Gurvansaikhan Mountain range, Ömnögobi province on 27 May, 1986 (Stephan, 1988). Sh.Boldbaatar also observed a single bird in this mountain range (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 11,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Only two individuals were found in high mountain of Gobi-Altai mountain range on migration. The individuals were recorded in tall bushy areas with high rocks and cliffs. From Stephan (1988), it could be a breeding species in the area. However, there is no evidence for this. This species migrates through this mountain range by late April – late May. According to (Harris, 2000), they feed on arthropods, mainly insects such as crickets, butterflies, caterpillars, wasps, bees, ants, beetles, dragonflies, also earthworms, small fish, young frogs, young of passerines and small rodents.

Habitat Type: Potential habitats are 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic-1.3. Extraction- 1.3.1. Mining, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation, 1.7. Fires; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. Migrants fly across protected areas and Important Bird Areas in southern Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Laniidae

263. Scientific Name: *Lanius minor*

Species Authority: Gmelin, 1788

Common Names: Lesser Grey Shrike (English), Khardukht dunkhai (Mongolian)

Subspecies in Mongolia: It is monotypic species (see Cramp (1993); Harris & Franklin (2000); Dickinson (2003) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It is known to breed in a single restricted area of Mongolia and the regional population size is unknown; therefore, until further information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Mauritania, Mali, Ireland, Portugal, Spain, United Kingdom, Faroe Islands, France, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Cameroon, Gabon, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, Kyrgyzstan, China, Mongolia.

Regional Distribution: This species nests in open habitats with scattered tall bushes and trees in river valleys and mountains near Bulgan sum of Khovd province. Bird watchers from Germany found a breeding pair with a nest in the valley of Bulgan River of Bulgan sum in Khovd province (46°6'N; 91°32'E; 1190 m asl) as the first record for the species in the country on 24 June, 2006 (German & Bräunlich, 2007).

Population: The global population consists of 3,000,000 - 10,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding pairs have been found only in Bulgan River valley of Bulgan sum, Khovd province. Breeding individuals possibly arrive in breeding sites by late April-early May the same as other Shrikes. Breeding begins in late May-early June. The breeding pair was found in open country and grassland with scattered trees or shrubs. The nest was placed in a small tree. The nest is a cup of twigs, plant stems and rootlets, leafy stems of herbaceous plants, lined with feathers, roots, fine grass, hair and wool. According to Harris (2000), the female usually lays 5-6, sometimes 3-7 eggs of glossy pale green, or bluish-green colour with olive or olive-brown, and light lavender- grey spots and small blotches. Both adults, but mainly the female, care for and feed the young on arthropods, beetles, grasshoppers, crickets, wasps, caterpillars, butterflies, moths, flies and spiders, snails, earthworms, and young voles, and young birds in the nest for 15 days. In late autumn and on migration, it occasionally takes fruits and seeds. The young birds leave the nest at c. 14 days, before they are able to fly properly. Pattern and duration of migration are not well known in Mongolia. However, they leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. Breeding birds migrate through protected areas and Important Bird Areas in western and southern Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Laniidae

264. Scientific Name: *Lanius excubitor*

Species Authority: Linnaeus, 1758

Common Names: Great Grey Shrike or Northern Shrike (English), Unsen dunkhai (Mongolian)

Subspecies in Mongolia: *L. e. mollis*, *L. e. sibiricus* (see Dawaa *et al.* (1994) and Harris & Franklin (2000) for further details)

Taxonomic notes: *Lanius excubitor* (Sibley & Monroe, 1990&1993) was split into Northern Grey Shrike *L. excubitor*, and Southern Grey Shrike *L. meridionalis* (including *pallidirostris*). Southern Grey Shrike has two races *L. m. meridionalis* (resident in southern Europe and North Africa), and Steppe Grey Shrike *L. m. pallidirostris* (breeding in Central Asia, including Mongolia) (Sangster *et al.*, 2002). Steppe Grey

Shrike breeds and winters in Mongolia. However, due to ongoing review of the species' taxonomy and conclusion of the BirdLife Taxonomic Working Group (BirdLife International, 2010), we treat Great Grey Shrike as a polymorphic species consisting of several subspecies including Steppe Grey Shrike.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Mexico, Saint Pierre and Miquelon, Bermuda, Iceland, Senegal, Western Sahara, Mauritania, Gambia, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Niger, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Burundi, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Brunei Darussalam, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds in Mongol-Altai Mountain Range and Gobi-Altai Mountain Range (alpine and subalpine zones and wet meadows); from Mongol-Altai to southern Shargyn Gobi and Northern Uvs Depression (Great Lakes Depression); possibly Khangai, Hövsgöl and Hentii Mountain Ranges (except for the main range, dense forested habitats, high altitudes, mountain slopes with unforested habitats); Valley of the Lakes; Baruunkhurai Depression; saxaul, elm trees and tall bushes in Trans-Altai, Northern and Eastern Gobi. It migrates through the breeding areas, open habitats in Orkhon-Selenge River basins, Herlen-Ulz River basins, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Busching, 2004; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 1,000,000 - 10,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and partial migrant. Most breeding, migrating and summering individuals arrive in Mongolia by late April-early May. Breeding begins in late May-early June. Breeding pairs build their nest in trees including Saxaul, elm and poplar and bushes like *Amygdalus* spp., *Tamarix* spp. and *Almond* spp. in scattered open bushy habitats in high mountains and river valleys, in desert steppe and mountain valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is placed at fairly low sites in the trees and bushes and higher in taller trees. The nest is a bulky cup of dry grass, thin twigs, lined with roots, wool, hair and feathers. The female usually lays 5-7, occasionally 8-9 eggs of glossy white, tinged greenish or buffish colour with brown, light reddish-brown, olive buff or pale purplish-grey spots and small blotches over most of the surface, but also tending to concentrate in a wreath about the larger end. Both parents, but chiefly the female, incubate the eggs for 15 days. Both parents care for and feed young mainly on small vertebrates (frogs, lizard, fledglings of small to medium-sized birds and small passerines, small rodents) and terrestrial invertebrates (beetles, grasshoppers,

crickets, wasps, spiders, scorpions, worms and snails). In winter and late autumn, they feed occasionally on carrion and fruits. Female broods the young for first day or two, male bringing food. The young leave the nest c. 19-20 days and live independently at c. 35 days. On migration, individuals occur singly or in loose small groups of 3-5 individuals in areas with bushes, high rocks and cliffs, Saxaul trees and bushes, and river and lake valleys with trees and bushes. Most breeding and migrating individuals leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions. Two birds were seen in groves of bushes and birch forest near Onon River in N Norovlin sum of Hentii province, and a bird was collected in bushes with willow trees in E Bayan-Uul sum of Dornod province in December, 2002 (S.Gombobaatar & D.Sumiya pers. comm.). An immature bird was photographed by S.Gombobaatar and B.Gantulga at a garden of the NUM on 14 February, 2007, and an adult bird was photographed in Khovd River valley of Khovd sum of Uvs province on 13 February, 2011 (Gombobaatar *et al.*, 2011b).

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2.); 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /a cutting of old Saxaul tree with its nest is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /Saxaul forest burn their breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both breeding and wintering birds/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010), and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Laniidae

265. Scientific Name: *Lanius sphenocercus*

Species Authority: Cabanis, 1873

Common Names: Chinese Grey Shrike or Chinese Great Grey Shrike (English), Khul dunkhai (Mongolian)

Subspecies in Mongolia: *L. s. sphenocercus* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); Harris & Franklin (2000) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It is known to breed in two restricted areas of Mongolia and the regional population size is unknown; therefore, until further information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: China, Mongolia, Russian Federation, Democratic People's Republic of Korea, Republic of Korea. It is considered vagrant in Japan.

Regional Distribution: This species may breed in Buir Lake-Khalkh River-Khyangan region and the Eastern Gobi (Dawaa *et al.*, 1994). S.Gombobaatar, P.Amartuvshin, Ch.Uuganbayar from the Mongolian Ornithological Society and Dr. Bernd Nicolai and his team, Museum Heineanum, Halberstadt in Germany found and photographed two pairs with 3 young birds in wide river valleys with poplar, willow and fruit trees at Khalkh River (5 km SE of Khalkh Gol sum centre or New Khalkh Gol sum centre) in Dornod province on 22 July, 2009 (S.Gombobaatar pers. comm. and photographs). Several birds were often seen in Saxaul trees in Borzon Gobi of Nomgon sum in Ömnögobi province in June and July and possibly breed there (N. Batsaikhan pers. comm.).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and summering individuals arrive in breeding areas by late April-early May. Breeding begins in late May-early June. Breeding ecology of the species is poorly known in the country. According to Harris (2000), breeding pairs build their nest in trees such as possibly Saxaul, willow and poplar trees in scattered open bushy habitats in high mountains and river valleys. The nest is a cup of dry leaves, twigs, dried grass stems, and rootlets, lined with roots, fine grasses, plant down, wool, hair and feathers. The female usually lays 6-8 eggs of glossy creamy or grayish-white tinged greenish or bluish colour with pale brown, reddish-brown, or grey spots and small blotches. Both parents, but chiefly the female, incubate the eggs for 9-13 days. Both parents care for and feed young mainly on small vertebrates (frogs, lizard, fledglings of small-sized birds, small rodents) and terrestrial invertebrates (beetles, bees, grasshoppers, crickets, wasps, spiders). The young leave the nest c. 19-21 days and live independently at c. 35-65 days. Duration and behavior of migration are not well known in Mongolia. Most breeding and summering individuals leave their breeding and summering sites for wintering grounds by late August-early September

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 8. Desert (8.2. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining

have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/, 9. Intrinsic factors- 9.9. Restricted range /due to restricted breeding range are cause of low breeding success and possibly decrease in species abundance/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 41.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Oriolidae

266. Scientific Name: *Oriolus oriolus*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Golden Oriole or Golden Oriole (English), Egel shargach or shargach byalzuukhai (Mongolian)

Subspecies in Mongolia: *O. o. oriolus* (see Svensson (1992) and Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is limited. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Iceland, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Togo, Niger, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Sao Tomé and Príncipe, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, the Democratic Republic of the Congo, Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova,

Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan.

Regional Distribution: This species nests in deciduous and mixed forests in Zereg sum of Khovd province. They migrate through Khovd River valley (Mongol Altai Mountain Range and Great Lakes Depression), Bayan Lake near Santmargad sum (Zavkhan Desert Steppe Depression), Great Lakes Depression, Bodonch and Bulgan River basins (Baruunkhurai Depression or Dzungariin Gobi) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a). One individual was recorded at Hustai Nuruu National Park on 21 July, 2007 (Hentii Mountain Range) (S.Gombobaatar & D.Usukhjargal pers. comm. and photographs).

Population: The global population consists of 20,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in breeding and summering sites by late April-early May. Breeding ecology of the species is almost unknown in Mongolia. It breeds in open woodland in river valleys. According to Harrison (1975), nest is placed in a horizontal fork in a tree. The nest is built by the female as a cup of twigs, grass stalks, bark, wool and the rims of the cup bound by twigs. Inner cup is lined with wool, hair, sometimes paper. The female lays 3-4 eggs of glossy white colour with pinkish or reddish-brown bold spots and blotches. Both sexes, but chiefly the female, incubate the eggs for 14-15 days. Both adults care for and feed young on terrestrial arthropods including grasshoppers, crickets, beetles in the nest for 14-15 days. In the non-breeding season, they forage seeds and fruits in trees and on the ground. On migration, individuals occur in open deciduous and mixed forest in river valley, mountain steppe and mountain valleys. They leave the breeding and summering sites by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: Potential threats follow:

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /most abundant avian predators such as Saker Falcon and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/, 9. Intrinsic factors- 9.5. Low densities-9.9. Restricted range /due to low density and restricted breeding range are cause of low breeding success and possibly decrease in species abundance/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Oriolidae

267. Scientific Name: *Oriolus chinensis*

Species Authority: Linnaeus, 1766

Common Names: Black-naped Oriole (English), Dornyn shargach or dornyn byalzuukhai (Mongolian)

Subspecies in Mongolia: *O. c. diffuses* (see Howard & Moore (1994) and Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species is found in deciduous and mixed forest in river valleys. A single bird was recorded near Buir Lake and Nömrög River of Dornod province (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000). U.Zöphel (German biologist) observed a single bird in Nömrög River valley of Dornod province (47°01' N; 119°22'E) on 8 June, 1995 (German-Mongolian expedition Dornod, 1995).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Only two individuals were recorded in eastern Mongolia during the breeding season, in deciduous and mixed forests of the river valley. Black-naped Orioles feed on a range of berries and terrestrial insects. They may migrate through eastern Mongolia in late April-early May and possibly in late August-early September. Duration and behavior of migration of the species are unknown in the country.

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1., 1.3. Extraction- 1.3.1. Mining, 1.7. Fires; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. Migrating birds may fly through protected areas and Important Bird Areas in the east and south of Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Dicruridae

268. Scientific Name: *Dicrurus macrocercus*

Species Authority: Vieillot, 1817

Common Names: Black Drongo or Himalayan Black Drongo (English), Khar dorongo (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as a vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Islamic Republic of Iran; Oman; Afghanistan; Pakistan; India; China; Sri Lanka; Nepal; Bangladesh; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Guam; Northern Mariana Islands.

Regional Distribution: D.Batdelger (Natural History Museum, Mongolia) and his colleagues found a single bird in planted poplar trees at the Juulchin Gobi tourist resort of Ömnögobi province on 22 June, 2000 (Boldbaatar, 2001; Bräunlich, 2002). Ch.Uuganbayar, a member of the State University of Agriculture and Mongolian Ornithological Society and researchers from Great Britain observed and photographed a pair in willow forest with reed beds at delta of Khalkh River and Buir Lake on 7-8 June, 2010 (Ch.Uuganbayar pers. comm. and photographs). P.Amartuvshin (MOS) and birders from Belgium saw and photographed a bird on poplar trees at vegetable fields of the Bayan bag of Bayandalai sum in Ömnögobi province on 6 June, 2010 and 8 birds at planted poplar trees at Dalanzadgad town in Ömnögobi province on 9 June, 2010 (P. Amartuvshin pers. comm. and photographs).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant and passage migrant. The species arrives at breeding sites by late May-mid-June. Breeding begins in late May-early June. The birds were found in deciduous forest in the east and planted poplar trees in the south during the spring migration. Occurrence of the species in the country has increased over last two years. They feed mainly on insects such as grasshoppers, cicadas, wasps, bees, ants, moths, beetles and dragonflies. Autumn migration of the species has not been recorded in Mongolia.

Habitat Type: Potential habitats are 1. Forest (1.4. on migration); 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1., 1.3. Extraction- 1.3.1. Mining, 1.7. Fires; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. Migrating birds fly through protected areas and Important Bird Areas in the east and south of Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

269. Scientific Name: *Perisoreus infaustus*

Species Authority: (Linnaeus, 1758)

Common Names: Siberian Jay (English), Hövchiin duuduush or duuduush (Mongolian)

Subspecies in Mongolia: *P. i. sibericus* (see Howard & Moore (1994) and Madge & Burn (1999) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Norway; Sweden; Poland; Slovakia; Finland; Latvia; Ukraine, Estonia; Belarus; Russian Federation; Kazakhstan; China; Mongolia.

Regional Distribution: This species nests on trees in dense coniferous forest, in mountain taiga forest, and rarely in mountain steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012) in Khangai, Hövsgöl and Hentii taiga areas including Orkhon-Selenge River basins, east to lower Onon and Balj Rivers, south to Bogd Uul, and north to the country border. It moves down to forest steppe and river valleys of the breeding areas in winter (Molleson, 1906; Lönnberg, 1909; Buturlin, 1913; Kozlova, 1930; Bold, 1969 & 1973; Sumiya, 1973; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1999; Boldbaatar, Boldbaatar, 2002; 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 2,000,000 - 10,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late March-early April. They breed in conifer forests in deep taiga forest. The nest is placed in a conifer tree, usually near the trunk and 1.5-11 m up. The nest is a thick cup of twigs and bark, lined with feathers and plant stalks. The female usually lays 4, rarely 3-5 eggs of glossy very pale bluish-green, blue or bluish-grey colour with olive-brown, grey and lilac-grey spots and fine blotches on the larger end. The eggs are incubated at daily intervals by the female alone, while the male brings food and feeds the female and young. Eyes of the young open at 7-8 days. They leave the nest at 21-24 days. Families remain together through following winter. Both parents care for and feed the young on forest arthropods including insects and their larvae, snails, small voles, eggs and young of small birds, carrion, and berries. In the non-breeding period, flocks of 5-11 individuals form and forage a variety of berries, seeds and fruits in trees and on the ground. They build up winter stores of berries hidden behind loose bark. Single birds may perch on top of coniferous trees but usually remain lower. The flocks descend to forest edges, lakes and river valleys with coniferous and mixed forest in winter. In late winter, they ascend to the breeding areas.

Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4. only feeding and seasonal movement); 11. Artificial - Terrestrial (11.3. only During seasonal movements in harsh winter).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/;

4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals including insecticide used against forest insects poisons Both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening this species in the breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Eurasian Sparrow Hawk in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

270. Scientific Name: *Garrulus glandarius*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Jay or Jay (English), Tsagchaa yatgashaazgai or yatga shaazgai (Mongolian)

Subspecies in Mongolia: *G. g. banbergi*, *G. g. brandtii* (see Svensson (1992); Howard & Moore (1994); Madge & Burn (1999) for further details).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta, Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova, Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Pakistan; India; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Cambodia; Hong Kong; Taiwan, Democratic People's Republic of Korea, Republic of Korea; Japan.

Regional Distribution: This species breeds in Khangai (Högnökhaan and Batkhaan Mountains); Hövsgöl

(Eg and Delgermörön Rivers) and Hentii (east to Onon and Balj River valley; south to upper Herlen River, Bogd Khaan Mountain; west to Kharaa and Yeröö Rivers) mountain ranges, Orkhon-Selenge River basins (Buteel and Khantai Ranges, Zelter River valley) and Ih Khyangan Mountain. It is found in valleys of Tes and Torkhilog Rivers (Northern Uvs Depression) in summer (Berezovskii, 1881; Kozlova, 1930&1932; Gagina, 1960; Grummit, 1960; Dementiev, 1966; Bold, 1969; Bold & Eregdendagva, 1970; Bold, 1973; Sumiya, 1973; Bold, 1977; Kleinstäuber & Succow, 1978; Erdenebat, 1989; Sumiya & Skryabin, 1989; Stepanyan, 1990; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 40,000,000 - 150,000,000 mature individuals. Global breeding and resident ranges are estimated at 21,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. It nests in trees in deciduous and mixed forest, rarely in coniferous forests in mountain taiga forest, forest steppe and rarely river valleys with dense forest (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build their nests in tree cavities between 3 and 6 m from the ground, sometimes higher. The nest is placed near the main trunk or secondary fork. The nest is a platform of small twigs and roots, lined with rootlets, lichens, feathers and other fine plant fibres. The clutch size varies 3-7, but is usually 5. The egg colour is bluish-green with brownish or greenish tinge. Both sexes, but female predominantly, incubate the eggs for 16-19 days. Both adults care for and feed the young on forest invertebrates and their larvae for 18-23 days. In non-breeding period, they forage seeds, berries, fruits, and other plant matter in trees and on the ground. Individuals occur in pairs or in groups of 5-12 during seasonal movements, descending to river valleys with deciduous and mixed forests, planted trees in towns and cities near forest, and rarely to family campsites near cattle. In early spring, or end of February, they ascend close to breeding areas.

Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 5. Wetlands (5.1., 5.5 near forest During seasonal movements and feeding); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /due to local people's strong belief, they shoot this species for meat use/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemical like insecticide used against forest insects poison both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening this species in the breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

271. Scientific Name: *Cyanopica cyanus*

Species Authority: (Pallas, 1776)

Common Names: Azure-winged Magpie (English), Tsenher tsantsaakhai or tsenher shaazgai (Mongolian)

Subspecies in Mongolia: *C. c. cyanus* (see Howard & Moore (1994) and Madge & Burn (1999) for further details)

Synonyms: *Cyanopica cyana* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Portugal; Spain; China; Mongolia; Hong Kong, Democratic People's Republic of Korea, Republic of Korea; Japan.

Regional Distribution: This species inhabits deciduous forest and thickets in river valleys in mountain taiga forest and forest steppe in Khangai (westernmost isolated distribution - 30 km south of Aldarkhaan sum, Uliastai town) and Hentii (east to Onon and Balj River valleys; south to Terelj, Tuul and Herlen River valleys) mountain ranges, Orkhon-Selenge River basins and Buir Lake-Khalkh River-Khyangan region. It moves and feeds in flocks in forest steppe, river valleys and mountain steppe with bushes and thickets after the breeding season (Tkachenko, 1920; Tugarinov, 1929; Kozlova, 1930; Shagdarsuren, 1959; Grummit, 1961; Piechocki, 1968; Piechocki, 1969; Bold, 1969; Bold & Eregdendagva, 1970; Piechocki, 1972, Bold, 1973; Bold, 1977; Kleinstäuber & Succow, 1978; Mauersberger, 1980; Mauersberger, 1982; Boldbaatar, 1988; Piechocki, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1997; Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003 Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Gantulga *et al.*, 2010).

Population: The global population consists of 3,000,000 - 30,000,000 mature individuals. Global breeding and resident ranges are estimated at 5,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding birds nest in woodlands and moister valleys with trees and scrub in dry areas. The nest is placed in a tree, in a main fork of trunk or larger branches, c. 0.4-5 m up. The nest is a cup of twigs, roots and moss, with some mud mixed in, lined thickly with plant fibres, hair and fur. The female usually lays 5-7, sometimes up to 9 eggs with very pale creamy-buff or creamy-olive, rarely bluish-white colour with dark brown, olive-brown or pale grey spots or small blotches. The female incubates the eggs alone for 15 days. Both adults and helpers care for and feed the young on forest insects. Diet of the species was recorded as adults, larvae and pupae of Gypsy Moth (*Lymantria dispar*) and stoneflies (*Plecoptera* spp.) in Khonin nuga, Northern Mongolia. Breeding success of the species in Khonin nuga was 69% in 2007, 49% in 2008, 63% in 2009. Breeding success was comparatively low for 2008 and 2009 due to predation and forest fire. Number of fledglings was higher for nests with helpers. Nestling feeding rates did not vary between breeding males and females over two years. However, females usually fed nestlings with food that males or helpers had delivered.

Average number of helpers per helped nest in 2009 was 2.4 ± 1.5 ($n = 7$), ranging from 1 to 5 helpers in Khonin nuga, Northern Mongolia (Gantulga *et al.*, 2011). During seasonal movements they descend to lowland in river valleys with dense deciduous and mixed forests and planted trees and gardens in cities and towns. Young birds remain in the family and form flocks consisting of 7-50 individuals. During seasonal movements, the species occurs in river valleys, foraging fruits, seeds and berries in lake and river valleys, and low hills in mountain and forest steppe. Insufficient food resource connected with forest fires increased helping behavior. Starvation of chicks was recorded in only one of the seven nests with helpers. Comparison of nests with and without helpers showed that helpers improved the survival of nestlings and breeding success of our study colony in Khonin nuga, Northern Mongolia. The nest failures without helpers were highly associated with nest predation (3 of 4) and starvation of nestlings. Breeding success of nests with helpers was high because of protection from predators and food delivery which allowed females to pay more attention to the nests (Gantulga *et al.*, 2011).

Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 5. Wetlands (5.1., 5.5. near forest During seasonal movements and feeding); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Live-stock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.7. Fires /many larvae and insects were burnt by the forest fire in 2009 and disappeared in Khonin nuga, northern Mongolia. In result of the fire, the birds in our study group faced unexpectedly low food availability following the fire in 2009 (Gantulga *et al.*, 2011)/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals including insecticide used against forest insects poison both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening this species in the breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period (Gantulga *et al.*, 2011)/; 8. Changes in native species dynamics- 8.2. Predators /most abundant predator in taiga forest is Carrion Crow. They prey upon both eggs and chicks in Khonin nuga in Hentii Mountain range (Gantulga *et al.*, 2011)/, 8.3. Prey or food base /breeding success of the species highly depends on number of Gypsy Moth (*Lymantra dispar*) in Khonin nuga in N Hentii (Gantulga *et al.*, 2011)/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

272. Scientific Name: *Pica pica*

Species Authority: (Linnaeus, 1758)

Common Names: Black-billed Magpie, Common Magpie, Magpie or White-rumped Magpie (English), Alag shaazgai or shaazgai (Mongolian)

Subspecies in Mongolia: *P. p. leucoptera* (see Howard & Moore (1994) and Madge & Burn (1999) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada; United States; Western Sahara; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova, Russian Federation; Cyprus; Israel; Saudi Arabia; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Mongolia; Bhutan; Myanmar; Thailand, Lao People's Democratic Republic; Viet Nam; Taiwan, Democratic People's Republic of Korea, Republic of Korea; Japan.

Regional Distribution: This species breeds in Buyant, Khovd, Yolt, and Sagsai River valleys and Kharkhira, Turgen and Mönh Khairkhan Mountains, east to Khasagt Khairkhan and Taishir Mountains - up to 2,200 m asl (Mongol-Altai Mountain Range); Baga and Ih Bogd (Gobi-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, and Torkholig River valleys, Ulaangom and Khovd towns, Khar-Us, Khar, and Dörgön Lake valleys, Zereg Depression, Jargalant Khairkhan Mountain (Great Lakes Depression); Zavkhan and Hungui River valleys (Zavkhan Desert Steppe Depression); Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, and Ögii Lake valleys (Khangai Mountain Range); Tui and Baidrag River basins (Southern Khangai Plateau); Khan Höhii range; Terhiin Tsagaan Lakes, and Ider and Chuluut River valleys (Tarvagatai-Bulnai Mountain Range); Hövsgöl Lake and Eg River valley and Darkhad Depression (Hövsgöl Mountain Range); Orkhon, Selenge, Eg, Kharaa, and Yeröö River basins (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and upper Herlen River valleys (Hentii Mountain Range); Herlen-Ulz River basins; Middle Khalkh Steppe including Ih Nart Mountain; Mongol Daguur Steppe; Eastern Mongolian Plain; Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga, and Galdastai Rivers and Buir Lake valleys (Buir Lake-Khalkh River-Khyangan region); Bulgan, Uyench, and Bodonch River valleys (Baruunkhurai Depression) (Przewalskii, 1876; Berezovskii, 1881; Molleson, 1906; Buturlin, 1913; Kozlova, 1930; Kozlova, 1932; Pevtsov, 1951; Tarasov, 1952; Tarasov, 1960; Shagdarsure, 1960; Sumiya, 1963; Bold, 1969; Bold, 1970; Bold, 1973; Bold, 1977; Bold & Eregdendagva, 1970; Sumiya, 1976; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 1997; Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008). A nest with three chicks was found at Baga Mod, Khanbogd sum, Ömnögobi province on 6 June, 2009. Few birds were recorded at Dariganga sum of

Sukhbaatar province, Saikhandulaan and Khanbogd sum of Ömnögobi province. Four individuals were found in Ikh Nart in Dornogobi province (Boldbaatar, 2005).

Population: The global population consists of 30,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 32,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. It is one of the most common breeders in Northern Mongolia. Number of the species increases to the north. Pairs build well-constructed nests on trees like willow, elm, birch, poplar and rarely scattered pine and larch trees, in a variety of different habitats, with coniferous, deciduous, mixed forests, planted trees in high mountains, mountain taiga forest, forest steppe, mountain steppe; villages, towns and other settlements in desert steppe (Boldbaatar, 2002; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a bulky cup of sticks, with mud incorporated and partly lining it, with a cup of fine roots, and occasionally plant fibre or hair. An open-work, sketchy-looking dome of twigs is built over the cup, leaving an opening at the cup edge. Nest materials of the species near human settlements may include wires. Nest is built by both sexes, the male bringing material. The female usually lays 5-8, rarely up to 10 eggs of glossy pale blue or greenish-blue, or rarely pale olive or buff colour with olive and grey spots, speckles and blotches. The female incubates the eggs alone for 17-18 days. Both parents care for the young and feed on various terrestrial invertebrates, beetles, grasshoppers, crickets, amphibians, reptiles, eggs and chicks of birds, small mammals, carrion, and ectoparasites of cattle in the nest for 22-28 days. During seasonal movements and winter, they forage seeds, fruits, berries of various plants and leftovers of human food. During seasonal movements, individuals or small numbers occur in open areas and visit families in harsh winter. They are also good defenders of their nests from other birds including Raven, Steppe Eagle, Golden Eagle, Cinereous Vulture and Amur Falcons. Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.1., 5.5. near forest during seasonal movements and feeding); 11. Artificial – Terrestrial (11.2. during seasonal movements, 11.3., 11.4., 11.5.); 12. Artificial – Aquatic (12.2., 12.6., 12.9. on feeding and seasonal movement).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Eagle-owl, Steppe Eagle, Golden Eagle, and Northern Goshawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

273. Scientific Name: *Podoces hendersoni*

Species Authority: Hume, 1871

Common Names: Mongolian Ground-jay or Henderson's Ground Jay (English), Mongol khulanjoroo or khulan joroo (Mongolian)

Subspecies in Mongolia: *P. h. hendersoni* (see Howard & Moore (1994) and Madge & Burn (1999) for further details)

Global Status: Least Concern

Regional Status: Vulnerable, C.

Rationale for Assessment: This species has assessed as Vulnerable, C. The population size is estimated as less than 10,000 mature individuals. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; China; Mongolia.

Regional Distribution: This species breeds at Borzongiin Gobi and Galbyn Gobi (Batsaikhan & Stubbe, 2008). It breeds in small Saxaul trees or scattered tall bushes including *Amygdalus mongolica*, small *Haloxylon ammodendron*, *Ulmus pumila* in mountain valleys and wide valleys of dried rivers with rocks in desert steppe and Gobi Desert (Batsaikhan & Stubbe, 2008; Gombobaatar, 2012) in Achit Lake valley (Mongol-Altai Mountain Range); mountain valleys in Gobi-Altai Mountain Range; Uvs Lake Depression, western Khan Höhii, south to Dörgön Lake (Great Lakes Depression); Zavkhan Desert Steppe Depression; southern Shargyn Gobi; Southern Khangai Plateau; Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes); Baruunkhurai Depression; Trans-Altai, Northern (Delger Khangai Mountains east to Sainshand) and Eastern Gobi (Fomin&Bold, 1991; Stubbe *et al.*, 1993 Dawaa *et al.*, 1994). It has been recorded in southernmost Tuul River valley during seasonal movements (Kozlova, 1930; Piechocki & Peters, 1966; Piechocki *et al.*, 1982; Mauersberger *et al.*, 1982; Stephan, 1988 and 1994; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1981; Sumiya, 1991; Boldbaatar, 1999; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Batsaikhan & Stubbe, 2008; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia. According to Boldbaatar (1981), this is a fairly abundant bird in the Gobi Desert of Mongolia. Batsaikhan and Stubbe (2008) considered that it is a rare bird in the region.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding ecology of the species is poorly studied in Mongolia. Breeding season begins early to late May. Breeding pairs build own nest on bushes (*Amygdalus mongolica*, *Zygophyllum xanthoxylon*) and trees such as Saxaul tree (*Haloxylon ammodendron*) and Elm tree (*Ulmus pumila*) close to the ground at 0.6-1.8 m in dried river beds and valleys of rocky mountains with broken rocks, boulders, and scattered bushes and scattered trees in desert steppe, and dry wide valleys of high mountains with rocky hills with scattered bushes in the Gobi. The nest is a cup of twigs, thin branches, and plant stems lined with dry finer grasses, wool, and animal hairs. Female lays 3-6 eggs in the nest. Both adults care for and feed young. They feed on insects and their larvae on ground near/under bushes and trees and in deep soil, digging with their strong bill. After breeding season, they stay in families consisting of 5-8 individuals, perching on tops of rocks and hills or feeding on the ground. They run very fast between bushes, flying for short distances near breeding sites. Family

groups occur in spring and winter campsites of local herders, feeding on insects near fences and cattle shelters. In harsh winters, they may come to winter campsites of local families in desert steppe and Gobi Desert, feeding on leftovers near the family's ger, and seeds of plants from droppings and dung of cattle. Habitat Type: 6. Rocky areas with scattered trees and bushes; 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2. near family in winter).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /local herders cut Saxaul trees, other trees and bushes such as *Amygdalus mongolica*, *Zygophyllum xanthoxylon*, *Ulmus pumila* for fuel in winter. This is one of the threats to the breeding species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /people illegally shoot this species for its meat, used as a traditional medicine for treating illness of liver and others (Batsaikhan & Stubbe, 2008). /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic / domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening this species in the breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such Saker Falcon and Grey Wolf (*Canis lupus*) during seasonal movements and breeding/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Approximately 11.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

274. Scientific Name: *Nucifraga caryocatactes*

Species Authority: (Linnaeus, 1758)

Common Names: Spotted Nutcracker, Nutcracker, Eurasian Nutcracker (English), Bidertsamarchshaazgai or samarch shaazgai (Mongolian)

Subspecies in Mongolia: *N. c. macrorynchos* (see Svensson (1992); Howard & Moore (1994); Madge & Burn (1999); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Portugal; Spain; United Kingdom, France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Russian Federation; Islamic Republic of Iran, Kazakhstan; Afghanistan; Pakistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Taiwan, Democratic People's Republic of Korea, Republic of Korea; Japan.

Regional Distribution: This species breeds in Tarvagatai-Bulnai Mountains and Khan Höhii Mountain range (Khangai Mountain Range); Uur, East Sayan, Ulaan Taiga (Hövsgöl Mountain Range); Orkhon, Selenge, Eg, Kharaa, and Yeröö River valleys (Burenkhaan, Buteel, Khantai Ranges) (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and upper Herlen River valleys and Bogd Mountain (Hentii Mountain Range). It descends to forest steppe and river valleys in winter. Birds have been identified in Mongol-Altai, Great Lakes Depression, Baruunkhurai Depression and Buir Lake-Khalkh River-Khyangan region. Birds possibly breed in Mongol-Altai, Baruunkhurai Depression and Buir Lake-Khalkh River-Khyangan region (Berezovskii, 1881; Buturlin, 1913; Tugarinov, 1916; Kozlova, 1930; Kozlova, 1932; Shagdarsuren, 1960; Bold, 1968; Bold, 1969; Bold, 1970; Bold, 1973; Bold, 1977; Sumiya, 1973; Skryabin *et al.*, 1976; Polyakov, 1912 *et al.*, 1982; Sergelen, 1986; Boldbaatar, 1988; Sumiya & Skryabin, 1989; Erdenebat, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1997; Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 2,500,000 - 10,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding pairs nest in trees in coniferous and rarely in mixed taiga forest and very rarely in dense mixed forest of river valleys in remote areas (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is placed in a tree, usually near the trunk and fairly high up. The nest is a cup of twigs, moss, lichens with some soil mixed in. The nest is lined with a thick layer of grass and hairy lichens. The female usually lays 3-4, at times 2-5 eggs of glossy very pale blue or greenish-blue colour, very finely spotted and speckled with olive-brown and grey, the markings so fine that the ground colour is the more conspicuous feature. The eggs are incubated by both sexes for 17-19 days. Both adults care for and feed young on various forest insects, rarely small birds, their eggs and nestlings, and small rodents for 21-28 days. The young leave nest at 28 days, but remain dependent on the parents for a further 2-3 months. The most important food resources for this species are the seeds of various pine trees (*Pinus sylvestris* and *P. sibirica*). They also take carrion such as road-kill in winter. After the breeding season, they form flocks of 5-7, sometimes up to 200 individuals foraging in trees and on the ground. In winter, they descend to low hills and river valleys with mixed and deciduous forest, and planted trees in towns and cities.

Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.1., 5.5. near forest During seasonal movements and feeding); 11. Artificial – Terrestrial (11.3., 11.4.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting / logging, particularly of trees with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in

public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning / chemicals like insecticides are a cause of individual poisoning both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening this species in the breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /potential predator is Northern Goshawk/, 8.3. Prey or food base /a decrease of food /seed source caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.3.% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

275. Scientific Name: *Pyrrhocorax pyrrhocorax*

Species Authority: (Linnaeus, 1758)

Common Names: Red-billed Chough or Chough (English), Ulaankhushuut jungaa or ulaan khushuut (Mongolian)

Subspecies in Mongolia: *P. p. brachipus* (see Howard & Moore (1994) and Madge & Burn (1999) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Germany; Switzerland; Italy; Austria; Hungary; Slovakia, Montenegro; Serbia; Albania; Greece; the Former Yugoslav Republic of Macedonia; Egypt; Turkey; Russian Federation; Ethiopia; Israel; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Republic of Korea. It is regionally extinct in Slovenia and Tunisia.

Regional Distribution: This species breeds at Baitag Bogd, Takhiin Shar Nuruu Mountains (Mongol-Altai Mountain Range); Ih and Baga Bogd, and Gurvansaikhan Mountains (Gobi-Altai Mountain Range); Siilhem, Kharkhiraa and Turgen Mountains; Uvs Lake and Khar-Uls, Khar, and Dörgön Lakes

valley (Great Lakes Depression); Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest); Orkhon-Selenge River basins; rocky mountains in steppe (Choir, Ih Sansar, Darkhan, and Yazaar Mountains), Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Nömrög Rivers and Buir Lake valleys (Buir Lake-Khalkh River-Khyangan region); Bulgan River valley (Baruunkhurai Depression) and Gobi (Trans-Altai and Northern Gobi) (Przewalskii, 1876; Berezovskii, 1881; Buturlin, 1913; Tugarinov, 1916; Kozlova, 1930; Sumiya & Skryabin, 1989; Tugarinov, 1932; Pevtsov, 1951; Dementiev *et al.*, 1960; Grummit, 1961; Bold, 1969; Bold & Eregdendagva, 1970; Bold, 1973; Bold, 1977; Mauersberger, 1980; Polyakov, 1912 *et al.*, 1982; Piechocki, 1982; Mauersberger, 1982; Boldbaatar, 1988; Erdenebat, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 1997; Boldbaatar, 1999; Boldbaatar, 2002; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008). Boldbaatar (2005) recorded 15 individuals at Ikh Nart, Gobisumber province.

Population: The global population consists of 300,000 - 1,500,000 mature individuals. Global breeding and resident ranges are estimated at 13,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding seasons begins by late March-early April. Breeding pairs nest in cliffs, crevices, under overhangs, or in a crevice or hole or cave in high mountains of forest steppe, mountain steppe, desert steppe and Gobi Desert and river valleys. It is also nests in crevices and cracks of buildings (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a bulky cup of sticks, plant-stems and grasses, lined with hair and wool. The nest is built by both sexes in 2-4 weeks. The female usually lays 3-4, rarely 2-7 eggs, glossy very pale, tinged greenish, creamy or faintly buff coloured olive-brown and grey with profuse or sparser and bolder small blotches, spots and specks. The female incubates the eggs alone for 17-23 days. Both parents, but chiefly the female, care for and feed young on terrestrial invertebrates such as insects, spiders, earthworms, and snails taken from the ground. The young leave the nest at c. 38 days and remain with adults for a further 3-4 weeks, probably feeding themselves by the third week. In winter and during seasonal movements, they eat vegetable matter including fallen grain, seeds, fruits and leftovers in garbage dumps. Young birds remain in the family, feeding together in open habitats in forest steppe, mountain steppe, steppe and human settlements. After the breeding season or in autumn, they form large flocks of 20-110 individuals foraging on the ground together. Most of the time, the species occurs in pairs in open habitats of mountainous areas with high rocks and cliffs, from taiga forest to desert steppe.

Habitat Type: 1. Forest (1.4. near settlement), 3. Shrub-land (3.3., 3.4. near settlement); 4. Grassland (4.4. only During seasonal movements and feeding); 6. Rocky areas; 7. Caves and Subterranean Habitats (7.1.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds have been found underneath all types of power lines in the steppe during the autumn and spring migration and electrocution by 15 KV power lines is one of the significant threats to the species (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening

this species in its breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Steppe Eagle, Golden eagle, Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010), and Northern Goshawk, and also domestic cat prey upon both adults and young/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

276. Scientific Name: *Corvus monedula*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Jackdaw, Western Jackdaw or Jackdaw (English), Kharlag heree or khar alagtuu (Mongolian)

Subspecies in Mongolia: *C. m. soemmeringii* (see Svensson (1992); Howard & Moore (1994); Madge & Burn (1999) for further details)

Synonyms: *Coloeus monedula* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada; United States; Saint Pierre and Miquelon, Iceland; Mauritania; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova, Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia; Japan. It is regionally extinct in Malta and Tunisia.

Regional Distribution: This species breeds in Khovd River valley to Ölgii town, Achit Lake valley; Mönkhkhairkhan, Bulgan and Uyench River valleys (Mongol-Altai Mountain Range and Great Lakes Depression). It has been observed in Noyon Bogd Mountain and Bulgan sum of Ömnögobi province

(Gobi-Altai) on migration (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a).

Population: The global population consists of 20,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. It breeds in a variety of habitats where nest-holes are present. Nest in a hole or crevice in tree, rocky outcrop or cliff, in building in deciduous forests in mountain steppe and river valleys and planted trees at settlement (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is of sticks, lined with wool, hair and plant fibre. In small holes sticks may be reduced or absent. In vertical holes, nests are built on lodged twigs and considerable quantities of twigs may accumulate under such sites. The nest is built by both sexes. The female usually lays 4-6, sometimes 2-9 eggs of glossy pale light blue of varying intensity, marked with small blotches, spots and specks of blackish-brown, olive-brown and blue-grey. The female incubates the eggs for 17-18 days. Both parents care for and feed young on small invertebrates found above ground between 2 and 18 mm in length, including larvae and pupae of Curculionidae, Coleoptera, Diptera and Lepidoptera. Snails, spiders and some insects also make up part of their animal diet. This Jackdaw also eats small rodents, eggs, and chicks of small birds. They take also carrion, such as road-kill. They forage in open areas and on the ground, but do take some food in trees. Plant matter in the jackdaw's diet consists of farm grains (barley, wheat), seeds, berries, and various fruits (Lockie, 1956). The young leave nest at 28-32 days, flying well by c. 35-36 days. During seasonal movements, they occur in flocks of 6-30 individuals in open areas near breeding sites and pastureland and forage on the ground. In winter their dominant food is seeds and other parts of plants.

Habitat Type: 1. Forest (1.4.), 3. Shrub-land (3.4. on migration and feeding); 4. Grassland (4.4. on migration and feeding); 5. Wetlands (5.1., 5.5. rarely found near forest During seasonal movements and feeding); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /potential predators are Steppe Eagle, Golden Eagle and Northern Goshawk on migration/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

277. Scientific Name: *Corvus dauuricus*

Species Authority: Pallas, 1776

Common Names: Daurian Jackdaw (English), Alagtuu heree or alagtuu (Mongolian)

Synonyms: *Coloeus dauuricus* Pallas, 1776

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is threatened by poisoning and subject to habitat loss and degradation by logging, forest fire and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: France; Netherlands, Russian Federation; Kazakhstan; China; Mongolia; Hong Kong; Taiwan, Democratic People's Republic of Korea, Republic of Korea; Japan.

Regional Distribution: This species nests in Khasagt Khairkhan and Taishir Mountains (Mongol-Altai Mountain Range); Arts Bogd and Ih Bogd Mountains (Gobi-Altai Mountain Range); Uvs Lake and the delta of Tes River (Uvs Depression); Khovd River and Khovd town (Great Lakes Depression); Bulgan River (Baruunkhurai Depression); from Khan Höhii Mountain range through Khangai and Hentii Mountains, east to Ulz River (Khangai and Hentii Mountain Ranges), Hövsgöl Lake and Eg River and Darkhad Depression (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and upper Herlen Rivers (Hentii Mountain Range); lower Herlen River basin; Middle Khalkh Steppe; Ulz River basin; Mongol Daguur Steppe; Khalkh, Degee, Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, and dry open habitats and river valleys with forest in Great Lakes Depression, Zavkhan Desert Steppe Depression, Eastern Mongolian Plain, Valley of the Lakes and Trans-Altai Gobi (Khaichiin bulag oases) (Przewalskii, 1876; Berezowskii, 1881; Tugarinov, 1925; Kozlova, 1930; Kozlova, 1932; Pevtsov, 1951; Tarasov, 1960; Grummit, 1961; Shagdarsuren, 1966; Bold, 1969; Bold&Eregdendagva, 1970; Bold, 1970; Fischer, 1970; Sumiya & Skryabin, 1973; Kleinstäuber&Succow, 1978; Mauersberger, 1980; Mauersberger, 1982; Piechocki, 1982; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008). More than 300 individuals have been wintered in Ulaanbaatar city for last 3 years.

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and partial migrant. Breeding and passage birds occur in breeding sites of Mongolia by late-April-early May. Breeding pairs build their nest in tree holes in old deciduous and mixed forests at the edges of mountain taiga forest, forest steppe, mountain steppe and river valleys by mid to late May (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They are semi-colonial nesters. There are two different breeding colour morphs: dark, and black and white. Breeding dark birds have a light grey or whitish patch on side of necks, and breast. They build nest made of twigs, branches, and large stems of dry thick grasses in a hole of old deciduous and

coniferous trees. Female lays 4-6 eggs of glossy pale light blue of varying intensity, marked with small blotches, spots and specks of blackish-brown, olive-brown and blue-grey. The female incubates the eggs for 17-18? days. Both parents care for and feed young on small terrestrial invertebrates, such as crickets, grasshoppers, spiders, young frogs, and small rodents. It forages on the ground in open areas and in trees. In late autumn and winter, birds eat wheat grains, seeds, and various fruits on the ground and in trees. They are gregarious and found in a pair, or in large flocks of 5-2,000 individuals in open areas near breeding sites and pastureland on migration. During the autumn migration, flocks of more than 200-500 birds occur in open habitats in forest steppe, open steppe and river valley foraging on the ground. Adult birds winter in large cities and towns, staying together with Carrion Crows. Mixed flocks roost in planted trees of cities and towns. These flocks feed at garbage dumps near cities and towns, and open ground with thin snow cover. Most breeding and migrating birds leave Mongolia by early September – late September.

Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. , 5.5. on migration, seasonal movement, or feeding); 11. Artificial – Terrestrial (11.2. on migration, 11.3.- 11.4.-11.5. roosting in winter).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /electrocuted birds on migration were found underneath 10 KV power lines in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Steppe Eagle, Golden Eagle, Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010), Northern Goshawk and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

278. Scientific Name: *Corvus frugilegus*

Species Authority: Linnaeus, 1758

Common Names: Rook or Eurasian Rook (English), Turliakh heree or turliakh (Mongolian)

Subspecies in Mongolia: *C. f. frugilegus*, *C. f. pastinator* (see Svensson (1992) and Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Iceland; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova, Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Islamic Republic of Iran, Kazakhstan; Kuwait; Uzbekistan; Afghanistan; Tajikistan; China; Mongolia; Taiwan, Democratic People's Republic of Korea, Republic of Korea; Japan; New Zealand.

Regional Distribution: This species nests in Buyant, Khovd and Yolt River valleys and Dayan Lake, Khasagt Khairkhan and Taishir Mountains (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, and Torkholig River valleys (Uvs Depression); Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest and alpine zone); Orkhon-Selenge River basins; patchy forest in Herlen River Basin, Middle Khalkh Steppe; Ulz River valley, Mongol Daguur Steppe; Khalkh, Nömrög River valleys and Ih Khyangan Mountain range (Buir Lake-Khalkh River-Khyangan region); Bulgan River valley (Baruunkhurai Depression). It migrates through the breeding areas, open habitats and river valleys in Northern, Eastern Gobi and Eastern Mongolian Plain (Buturlin, 1913; Sushkin, 1925; Tugarinov, 1929; Kozlova, 1930; Kozlova, 1932; Tarasov, 1952; Shagdarsuren, 1960; Dementiev, 1966; Shagdarsuren, 1967; Bold, 1969; Bold & Eregdendagva, 1970; Bold, 1973; Bold, 1977; Boldbaatar, 1988; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1997; Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 60,000,000 - 220,000,000 mature individuals. Global breeding and resident ranges are estimated at 19,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and partial migrant. Most breeding and migrating individuals arrive in Mongolia by late April-early May. Breeding begins in mid to late May. Breeding pairs build own nest on trees in deciduous, coniferous and mixed forests in high mountain forest, mountain taiga forest, forest steppe, river valleys and patchy woodland in steppe and planted trees near settlements (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Colonies are formed in groups of adjacent larger trees; nests are placed in tree tops and may be very close to each other. The

nest is a bulky cup of sticks with earth built into it, lined with grass, roots, leaves, moss, plants, wool and hair. Both adults build the nest. The male brings nest material which is built in by female. The female usually lays 3-5, sometimes 6-9 eggs of glossy light blue, bluish-green, marked with greenish-buff, olive, olive-brown or blackish-olive colour with olive-green mottles, large blotches and spots to fine profuse specklings. The female incubates the eggs at daily intervals for 16-20 days. Young are brooded by female and fed by male at first; later fed by both parents. The young leave nest at 29-30 days. The young remain in the family and forage terrestrial invertebrates on the ground and plant matter in trees. Some adult individuals winter in cities and towns. During seasonal movements, or on migration, they join with Carrion Crow and Daurian Jackdaw, forming flocks of 6-1,500 individuals and feeding on wheat grains, plant seeds, fruits and carrion in winter. In late autumn or on migration, flocks are found in open dry habitats feeding on grasshoppers, crickets, spiders, earthworms, and snails. Most breeding and migrating individuals leave their breeding site for wintering grounds by early to late September. There are several records of wintering rooks in large cities in Mongolia.

Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1., 5.5. on migration, seasonal movement, or feeding); 11. Artificial – Terrestrial (11.2. on migration, 11.3.- 11.4.-11.5. roosting in winter).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters-7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Steppe Eagle, Golden Eagle, Saker Falcon and Northern Goshawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species. Starved and dead individuals found in town and city/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

279. Scientific Name: *Corvus corone*

Species Authority: Linnaeus, 1758

Common Names: Carrion Crow (English), Khar heree (Mongolian)

Subspecies in Mongolia: *C. c. orientalis*, *C. c. cornix* (see Svensson (1992); Howard & Moore (1994); Madge & Burn (1999) for further details)

Taxonomical Notes: *Corvus cornix* (Hooded Crow in English, Saaral heree in Mongolian). Fomin & Bold (1991), Stepanyan (1990), Dawaa *et al.* (1994), Snow *et al.* (1998), Knox *et al.* (2002), Stepanyan (2003),

Bold *et al.* (2007) and Gombobaatar (2009) considered this a separate species. However, due to limited scientific evidence on the separation of the species, recent publications, including BirdLife International (2010) have classified Hooded Crow as a subspecies of Carrion Crow.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: N.Tseveenmyadag (MAS, Mongolia), S.Gantugs (KhU, Mongolia), P.Jargalsaikhan (MOS & NUM, Mongolia), B.Yumjirmaa (MOS, Mongolia), and J.Munkhbat (NUM, Mongolia).

Global Distribution: Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia, Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia, Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova, Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia; Viet Nam; Hong Kong; Democratic People's Republic of Korea, Republic of Korea; Japan.

Regional Distribution: This species nests in Mongol-Altai and Gobi-Altai Mountain Ranges (except for alpine, subalpine zones, and wet meadows); forested areas in Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest and high altitude areas); patchy woodlands in Mongol Daguur, Middle Khalkh Steppes and Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; Baruunkhurai Depression. It also occurs in Valley of the Lakes, Trans-Altai, Alashani, Northern and Eastern Gobi (Molleson, 1906; Tugarinov, 1916; Tugarinov, 1932; Kozlova, 1930; Pevtsov, 1951; Shagdarsuren, 1959; Shagdarsuren, 1960; Tarasov, 1960; Davaa, 1963; Bold, 1969; Bold & Eregdendagva, 1970; Bold, 1973; Bold, 1977; Kleinstäuber & Succow, 1978; Mauersberger, 1980; Mauersberger, 1982; Kishinskii & Fomin, 1982; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 1997; Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Hooded Crow's Regional Distribution: Approximately 8.8% of the species' range in Mongolia occurs within protected areas. This species has been recorded in deciduous, mixed and coniferous forests and planted trees near settlements in Bogd Uul (Hentii Mountain Range), Khovd and Buyant River valleys and Khovd town (Mongol-Altai Mountain Range) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 1999; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 45,000,000 - 200,000,000 mature individuals. Global breeding and resident ranges are estimated at 33,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Increasing, compared with its population in 2000.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late April-late May. Breeding pairs build their nest in trees in deciduous, mixed and coniferous forests in high mountain forest, mountain taiga forest, forest steppe, river valleys and patchy woodland in steppe and planted trees near settled areas (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Nest is usually in a tree, often at a considerable height with a wide view around, but in less favourable habitats may be low in a small tree or shrub, on a ledge of a cliff or rocky outcrop, or in a small gully; rarely in heather on low islands. The nest is a bulky cup, usually in a fork, of sticks, and moss, bound with earth, lined with wool, hair and sometimes feathers. The female usually lays 4-6, rarely 7 eggs of slightly glossy blue, bluish-

green, marked with greenish-buff, olive, olive-brown or blackish-olive colour with olive-green mottles, large blotches and spots to fine profuse specklings. There is no consistent variation between eggs of Carrion Crow and Hooded Crow. The female incubates the eggs alone for 18-20 days. Both adults feed young on terrestrial invertebrates, carrion, leftovers, and plant matter. It is an opportunistic species in feeding. The young leave the nest at 4-5 weeks. In breeding season individuals and pairs occur. During seasonal movements, they are found in flocks of 6-2,000 individuals joining with Rook and Daurian Jackdaw to forage seeds, fruits and roots of various plants on the ground, and in trees.

Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. , 5.5. on migration, seasonal movement, or feeding); 11. Artificial – Terrestrial (11.2. on migration, 11.3.- 11.4.-11.5. roosting in winter).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Steppe Eagle, Golden Eagle, and Northern Goshawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species. Starved and dead individuals found in town and city/; 10. Human disturbance- 10.1. Recreation and tourism / construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Corvidae

280. Scientific Name: *Corvus corax*

Species Authority: Linnaeus, 1758

Common Names: Common Raven or Northern Raven (English), Khon heree (Mongolian)

Subspecies in Mongolia: *C. c. kamtshaticus* (see Howard & Moore (1994); Madge & Burn (1999); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada; United States; Mexico; Guatemala; El Salvador; Honduras; Nicaragua; Saint Pierre and Miquelon; Greenland; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova, Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Japan.

Regional Distribution: This species nests from Mongol-Altai Mountain Range to Buir Lake-Khalkh River-Khyangan region; from Hövsgöl Mountain Range to the Gobi Desert (Trans-Altai and Eastern Gobi Depression) (Berezowskii, 1881; Tugarinov, 1916; Kozlov, 1923; Sushkin, 1925; Kozlova, 1930; Kozlova, 1932; Tugarinov, 1932; Tarasov, 1960; Bold, 1966; Dementiev & Naumov, 1966; Grummit, 1966; Shagdarsuren, 1966; Bold, 1969; Bold & Eregdendagva, 1970; Eregdendagva *et al.*, 1970; Bold, 1973; Sumiya, 1973; Bold, 1977; Skryabin *et al.*, 1977; Kleinstäuber & Succow, 1978; Piechocki, 1982; Sergelen, 1986; Boldbaatar, 1988; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 1997. Boldbaatar, 1999; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 16,000,000 mature individuals. Global breeding and resident ranges are estimated at 52,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late March–mid-April, sometimes early May depending on weather conditions. Both breeding birds build nest in cliffs, rocks, dry river beds, trees, poles, pylons and other man-made substrates in almost all habitats of natural belts and zones and near settlements (Potapov *et al.*, 2001; Potapov *et al.*, 2002; Gombobaatar *et al.*, 2009; Gombobaatar, 2012). The nest is a large mass of twigs, larger sticks, cotton, plastic bags, wires, bones of cattle and other wildlife and vegetable matter, well-lined with grass tufts, wool and hair. The female usually lays 4-6, rarely 3-7 eggs of glossy light blue, greenish- blue, or pale green with light olive, olive-brown, or dark or blackish-brown, and light grey specks, spots, irregular blotches, and streaks. The eggs are incubated by the female alone for 1-2 day intervals. Male feeds the female and young for 20-21 days. Both parents feed young on various foods including terrestrial invertebrates including grasshoppers, crickets, beetles, flies, snails, molluscs, small and young amphibians, reptiles, small chicks of birds, and small mammals, and carrion. They also take plants such as fruits, and seeds. They also eat leftovers in garbage dumps, carrion, and road-kill. The young leave nest at 5-6 weeks. After the breeding season, the young remain together with parents. During seasonal movements and in winter, the species occurs in pairs throughout all habitats including human settled areas from taiga forest to Gobi Desert in Mongolia. Habitat Type: 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. with rocks, cliffs, and artificial substrates); 5. Wetlands (5.1., 5.5. near forest and human-made substrates); 6. Rocky areas; 8. Desert (8.2., 8.3. with nesting substrates); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.); 12. Artificial – Aquatic (12.2., 12.6.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in low rock boulders that are destroyed by livestock in the Central Mongolian steppe/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2.

Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests, is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation / building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /hunting for local trade and for the medicinal purposes of the bird. Buddhist religious people use its eyes and claws for medicine and religious ceremony. Illegal shooting has happened recent years due to needs of primary and secondary feathers of the species for Shaman people traditional and ceremony clothes/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds were very frequently found underneath all types of power lines in the steppe during the autumn and spring migration and electrocution by 15 KV power lines is one of the significant threats to the species (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening this species in the breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Steppe Eagle, Golden Eagle, and Eurasian Eagle-owl eat both adults and young/, 8.3. Prey or food base /vole-eating birds, including this species, ate grain in the steppe mixed with rodenticide Bromadilone, dying in high numbers in 2002 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/; 10. Human disturbance- 10.1. Recreation and tourism / construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Bombycillidae

281. Scientific Name: *Bombycilla garrulus*

Species Authority: (Linnaeus, 1758)

Common Names: Bohemian Waxwing or Waxwing (English), Shiver enhetbyalzuukhai or enhet byalzuukhai (Mongolian)

Subspecies in Mongolia: *B. g. centralasiae* (see Svensson (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2005) for further details)

Synonyms: *Lanius garrulous* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, logging and human disturbance, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009**Assessors:** S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).**Reviewers:** T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).**Global Distribution:** Canada; United States; Saint Pierre and Miquelon; Iceland; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Russian Federation; Cyprus; Israel; Islamic Republic of Iran; Kazakhstan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.**Regional Distribution:** This species nests in Khangai, Hövsgöl and Hentii Mountain Ranges, Khalkh River valley and Ih Khyangan Mountain. No proper documentation for breeding of the species has been reported in the country. Winter visitors from northern breeding ground and partial migrants occur in river valleys (Khovd, and Buyant Rivers) (Great Lakes Depression) and planted fruit-trees at Uvs and Khovd towns, and towns and cities in forested areas during winter. It migrates through breeding areas and Middle Khalkh Steppe, and Mongol Daguur Steppe SW of Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Busching, 2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Sumiya, 2006).**Population:** The global population consists of 3,000,000 mature individuals. Global breeding and resident ranges are estimated at 12,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.**Regional Population Trend:** Stable.**Habitats & Ecology:** In Mongolia, this is a resident breeder and winter visitor. It nests in coniferous and mixed mountain taiga forest, forest steppe and rarely in river valleys in dense taiga forest (Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build in a tree, usually a conifer, 1.5-6 m up. The nest is placed often on forest edges or by lakes or streams. The nest is a cup of conifer twigs and grasses, lined with hair and down. The female usually lays 5, sometimes 4-6 eggs of glossy pale blue or greyish-blue, rarely slightly buffish colour with black, or grey spots and sparse blurry markings. The eggs are incubated by the female alone for 13-14 days. Male feeds the young in early stage. The young are fed with regurgitated insects and berries. They leave the nest at 15-17 days. Breeding and non-breeding individuals form flocks of 6-300 individuals foraging seeds, berries and other fruits in trees and on the ground in edges of taiga forest, forest steppe, and river valleys.**Habitat Type:** 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.1., 5.5. near forest During seasonal movements and feeding); 8. Desert (8.2., 8.3. during seasonal movements); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements); 12. Artificial – Aquatic (12.6. on feeding and seasonal movement).**Dominant threats:** 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution

(affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic / domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders are threatening this species in the breeding sites/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uganbayar & Gombobaatar, 2010), Northern Goshawk and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire / see 1.7./.

Conservation Measures: Approximately 11.3.% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Bombycillidae

282. Scientific Name: *Bombycilla japonica*

Species Authority: (Siebold, 1824)

Common Names: Japanese Waxwing or East Asian Waxwing (English), Naran enhetbyalzuukhai or khar mörnii enhet byalzuukhai (Mongolian)

Global Status: Near Threatened

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation (Amur river basin); China; Mongolia; Hong Kong; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: It was considered a vagrant in the valley of Nömrög River in eastern Mongolia (Bold *et al.*, 2002) and listed in the list of birds in the country (Bold *et al.*, 2007; Gombobaatar, 2009). The record of the species is uncertain for the country.

Population: The global population is unknown. Global breeding and resident ranges are estimated at 869,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Only one doubtful record in eastern Mongolia has been reported. According to del Hoyo *et al.* (2005), it breeds in forested areas, apparently favouring coniferous forest with fruit trees. On migration the species occurs in deciduous and mixed forest. It feeds on insects during the breeding season and chiefly on berries and seeds in winter and on migration. Breeding ecology is poorly known in the world. Considering the global distribution of the species and

general migration routes of the country, it is most likely to occur in forested areas of Khalkh and Nömrög River valleys.

Habitat Type: Potential habitats are 1. Forest (1.1., 1.4.), 3. Shrub-land (3.3., 3.4.); 5. Wetlands (5.1., 5.5. near forest During seasonal movements and feeding).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3. Extraction- 1.3.1. Mining, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.7. Fires; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species. This species possibly migrates through eastern Mongolian protected areas and Important Bird Areas in the east.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Paridae

283. Scientific Name: *Parus major*

Species Authority: Linnaeus, 1758

Common Names: Great Tit (English), Ih höhbukh or ih höh bukh (Mongolian)

Subspecies in Mongolia: *P. m. major*, *P.m.bokharensis*, *P. m. kapustini* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2007); BirdLife International, (2010) for further details)

Taxonomical Notes: *Parus major* (Sibley & Monroe, 1990&1993) was split by Päckert *et al.* (2005) into *P. major*, *P. minor* and *P. cinereus*, who also transferred *P. bokharensis* (Sibley & Monroe, 1990&1993) into *P. major*. The BirdLife Taxonomic Working Group supports that author's treatment of *bokharensis* because morphological, vocal and genetic differences are small. The treatment of *minor* and *cinereus* as species is not here followed, owing to the author's own reservations about separating *cinereus* from *minor* since the morphological, vocal and genetic differences are minor, and since there is uncertainty over taxonomic relationships in the westernmost Himalayan region. These permit the possibility that *major* and *bokharensis* are connected to *cinereus* and *cinereus* to *minor*. It is therefore felt that there is insufficient evidence to treat any of these taxa as distinct from *major* at the species level (BirdLife International, 2010).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav

Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds from Ölgii town to lower Khovd; to Yolt River, Kharkhira and Turgen Mountains (Mongol-Altai Mountain Range); lower Torkholig and Tes River valleys (from Bayantes sum south) (Northern Uvs Depression); from Tarvagatai-Bulnai Mountains (W Khangai Mountain), across Hövsgöl Mountains to upper Onon River (Khangai, Hövsgöl and Hentii Mountain Ranges); north to the country border, south to southern Khangai –Orkhon River valley, east to upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen River valleys (Hentii Mountain Range); Khalkh, Degee, and Nömrög Rivers, and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It winters in breeding areas, natural forests and planted trees in the Great Lakes Depression, Khangai and Hövsgöl Mountain Ranges, Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe, Mongol Daguur Steppe, and Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Global distribution of *Parus bokharensis* Lichtenstein, 1823 (Turkestan Tit in English and Tsenher höhbukh or tsenher höh bukh in Mongolian). Russian Federation; Islamic Republic of Iran; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia.

Regional Distribution of *Parus bokharensis* Lichtenstein, 1823. This species nests and winters in deciduous and mixed forest in Bulgan River valley (Baruunkhurai Depression or Dzungariin Gobi) (Fomin & Bold, 1991; Dawaa *et al.*, 1994). Approximately 3.9% of the species' range in Mongolia occurs within protected areas.

Population: The global population consists of 300,000,000 - 110,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, Great Tit is a resident breeder. Breeding begins in late May-early June. Breeding habitats are deciduous and mixed forest with large thickets, and bushes in high mountain forest, mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs nest in a tree hole, or cavity, or nest boxes. The nest is a cup of roots, moss, lichens, and grass, lined with softer hair, plant down, occasionally feathers. The female usually lays 8-13 eggs of slightly glossy white colour with purplish-red, or pale purple spots, or small blotches. The eggs are incubated by the female alone for 13-14 days. Both parents feed young on tree-living insects and their larvae for 16-22 days. They forage in tree branches, on trunks, or on the ground. The young remain together in family parties after emerging. During seasonal movements and in winter, the species occurs in pairs or flocks of 4-30 individuals, in deciduous, coniferous, mixed forest, edges of the forest, trees in river valleys and forest steppe, and gardens in towns and cities.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. During seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial -

4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of fences and buildings using pipes with open tops is a cause of death for many individuals in towns or villages/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Paridae

284. Scientific Name: *Parus palustris*

Species Authority: Linnaeus, 1758

Common Names: Marsh Tit, Eurasian Marsh Tit or Asian Marsh Tit (English), Khartolgoit höhbukh or khar magnait höh bukh (Mongolian)

Subspecies in Mongolia: *P. p. brevirostris* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2007) for further details)

Synonyms: *Poecile palustris* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Ireland; Portugal; Spain; United Kingdom; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova; Russian Federation; Kazakhstan; Afghanistan; China; Mongolia; Myanmar; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at Tes River (from Bayantes sum) to the country border (Northern Uvs Depression); from Khan Höhii Mountain through Khangai and Hentii Mountain Ranges; Orkhon-Selenge River basins to Ulz River (Ereen mountain) (Khangai, Hövsgöl and Hentii Mountain Ranges); north to the state border and south to SE Khangai and further to upper Tuul, and Herlen Rivers (Bogd Khaan Mountain) and Nömrög River and Ih Khyangan Mountain (Buir Lake-Khalkh River-

Khyangan region) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats of the species in the country are deciduous woodland and scrub. The nest is placed usually in a natural hole in a tree or stump in coniferous, deciduous and mixed forest in mountain taiga, forest steppe, river valleys and patchy woodland in mountains (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Nest holes are placed in rotten wood may be modified and infrequently it excavates a hole. The nest is a cup of moss, lined with hair and some feathers to form a felted layer and is built by the female alone. The female usually lays 6-9 eggs of slightly glossy white colour with light brown, reddish-brown, or purplish-red markings. The female incubates the eggs alone for 13-17 days. Both parents care for and feed young on forest insects and their larvae in the nest for 16-21 days. They forage in tree, tree branches, or very rarely close to ground. During seasonal movements and winter they move down to forest river valleys and gardens and planted trees in or near towns and cities. During seasonal movements and winter, they are found in small groups of 4-7 birds joined with Willow Tit. They feed on seeds and wintering larvae of arthropods in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. During seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Eurasian Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Paridae

285. Scientific Name: *Parus montanus*

Species Authority: Conrad von Baldenstein, 1827

Common Names: Willow Tit (English), Hurentolgoit höhbukh or huren tolgoit höh bukh (Mongolian)

Subspecies in Mongolia: *P. m. baicalensis* (see Dawaa *et al.* (1994); del Hoyo *et al.* (2007) for further details)

Synonyms: *Poecile montanus* (Baldenstein, 1827)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Spain; United Kingdom; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Moldova; Russian Federation; Kazakhstan; Kyrgyzstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at upper Khovd River to Yolt River valley and southern Mönh Khaikhan Mountain (Khujirt River valley); Khasagt Kairkhan, N Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); northern Uvs Lake and Torkholig River delta and Tes River valley (Northern Uvs Depression); Bulgan River valley (Baruunkhurai Depression); from Khan Höhii Mountain, north to the country border, south to W Khangai Mountain and through the N Khangai Mountain to upper Orkhon River valley (Khangai Mountain Range and Orkhon-Selenge River basins); Hövsgöl Lake valley (Hövsgöl Mountain Range); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen (Hentii Mountain Range), Khalkh, Degee, and Nömrög River valleys and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It is found in the Mongol-Altai Mountain Range, Great Lakes Depression, Khangai and Hentii Mountain Ranges, and Herlen-Ulz River basins in winter (Kozlova, 1930; Sergelen, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2002; Boldbaatar, 2003, Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 150,000,000 - 500,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. They move down to forest steppe and river valleys in forest steppe and steppe. Breeding habitats are often similar to that of Marsh Tit but more likely to occur in areas of deciduous scrub in conifer forest regions or borders. The nest is placed in a dead tree, tree stump or dead sapling where wood is soft enough for bird to excavate its own cavity, although occasionally in natural hollow or woodpecker hole in coniferous, deciduous, and mixed forest in taiga, forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Birch *Betula platyphylla* is the key tree

for cavity-nesting birds, including this species, and many hole-nesters depend as secondary users on the Willow Tit (Mühlenberg & Samiya, 2005). The nest is mainly in a cavity lined with wood fibre and small fragments, rarely with moss; with an inner lining, sparse at times, of hair and occasionally a few feathers. The female usually lays 6-9, rarely 5-13 eggs of glossy white colour with reddish-brown, light red or purplish-red speckles, spots, or finely blotches. The eggs are incubated by the female alone for 13-15 days. Male feeds the female. Both parents care for and feed young on forest insects and their larvae in the nest for 17-19 days. They take a prey from tree trunk, and branches. The species occurs in pairs during the breeding season. They are found in groups of 3-25 individuals in all types of forest including coniferous and deciduous trees in river valleys in the steppe, gardens in towns and cities during seasonal movements and in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. During seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of fences and buildings using pipes with open tops is a cause of death for many individuals in towns or villages/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.3.% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Paridae

286. Scientific Name: *Parus cinctus*

Species Authority: Boddaert, 1783

Common Names: Siberian Tit (English), Shiver höhbukh or Lapland höh buk (Mongolian)

Subspecies in Mongolia: *P. c. sayanus*, *P. c. cinctus* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2007) for further details)

Synonyms: *Poecile cinctus* (Boddaert, 1783)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; United States; Norway; Sweden; Finland; Russian Federation; Kazakhstan; China; Mongolia.

Regional Distribution: This species nests and winters in coniferous and mixed, and rarely in deciduous forest in mountain taiga, forest steppe and river valleys in Khan Höhii, Tarvagatai and Bulnai (Khangai Mountain Range); Hövsgöl Lake valley, Eg River and Darkhad Depression (Hövsgöl Mountain Range); lower Orkhon, Selenge, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Terelj, Onon, Balj, Huder, and Bulnai River valleys (Hentii Mountain Range) and Khalkh, Degee, Nömrög River valleys and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 5,000,000 - 50,000,000 mature individuals. Global breeding and resident ranges are estimated at 10,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are conifer woods, occasionally in mixed woods. Both adults excavate nest a hole in a tree, or find old woodpecker hole in conifers, or in birch, or aspen. The nest is built by the female and placed often low up to 0.7-4.5 m up. The nest consists of moss with a cup lined with hair. The female lays usually 6-10 glossy white eggs with light red or reddish-brown speckles, spots, or fine blotches. Eggs are incubated by the female alone for 14-15 days. Male feeds the female while incubating. Both sexes care for and feed young on forest insects carrying in the bill in the nest at 19 days. Feeding and breeding ecology and behavior are poorly known in Mongolia. They occur in few numbers, or singly in conifers and might move down to forest steppe and river valleys in winter.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13. during seasonal movements and winter); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movement and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species

dynamics- 8.2. Predators /predators such as Northern Goshawk and Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Paridae

287. Scientific Name: *Parus ater*

Species Authority: Linnaeus, 1758

Common Names: Coal Tit or Coal Titmouse (English), Ödörch höhbukh or ödörch höh bukh (Mongolian)

Subspecies in Mongolia: *P. a. ater* (see del Hoyo *et al.* (2007) for further details)

Synonyms: *Periparus ater* Linnaeus, 1758

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Russian Federation; Cyprus; Israel; Lebanon; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in Kharkhira Mountain Massif and Yolt River (Mongol-Altai Mountain Range); Tes River basin (Bayantes sum to the country border) (Northern Uvs Depression); Khangai, Hövsgöl and Hentii Mountain Ranges, including Orkhon-Selenge River basins. It winters in the breeding areas, mountain forest, woodland in river valleys and patchy woodland in southern Mongol-Altai Mountain Range, upper Minj, Tuul, Terelj, Onon, Balj, and Herlen River valleys (Hentii Mountain Range), Ulz River basin (Mongol Daguur Steppe) and Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are coniferous forest, rarely deciduous forest. Breeding pairs nest in a hole in a tree (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a cup of moss and spiders' webs, lined with hair, plant down and feathers. The female lays usually 7-9 slightly glossy white eggs with light red, purplish-red, or reddish-brown fine speckles, spots, or small blotches. The female incubates the eggs alone for 14-18 days. Male feeds the female while incubating. Both sexes care for and feed young on tree-living insects and their larvae for 16-19 days. The young live independently after c. 2 weeks. They hang upside down on the tips of branches while foraging on coniferous and deciduous trees. During seasonal movements and in winter, they occur singly or in small groups of 3-6 individuals joining with Willow Tits in coniferous and deciduous trees in forest steppe, river valleys and gardens in towns and cities.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13. during seasonal movements and in winter); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Paridae

288. Scientific Name: *Parus cyanus*

Species Authority: Pallas, 1770

Common Names: Azure Tit (English), Nomin höhbukh or nomin höh bukh (Mongolian)

Subspecies in Mongolia: *P. c. tianschanicus*, *P. c. yenisseeensis* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2007) for further details)

Synonyms: *Cyanistes cyanus* (Pallas, 1770)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: France; Germany; Austria; Sweden; Czech Republic; Poland; Hungary; Slovakia; Montenegro; Serbia; Romania; Finland; Latvia; Ukraine; Belarus; Russian Federation; Islamic Republic of Iran; Kazakhstan; Kyrgyzstan; China; Mongolia; Japan.

Regional Distribution: This species breeds at Khovd River, and Achit and Uureg Lakes, and Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); Uyench, Bodonch and Bulgan Rivers (Baruunkhurai Depression); through the Mongol-Altai Mountain Range and Shargyn Gobi; Tes River valley (Northern Uvs Depression); Orkhon-Selenge River basins to SE Khangai Mountain Range (Bogd river valley), Tarvagatai Mountain and across mixed forests in the main range (Khangai Mountain Range); from SE Khangai, east through Hentii Mountain Range to upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai and Herlen Rivers (Hentii Mountain Range); Khalkh, Degee and Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It winters in the breeding areas, forested territories and woodlands in Great Lakes Depression, Khangai and Hövsgöl Mountain Ranges, Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, and Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are woodland in thickets and undergrowth usually near water, or in willow trees in mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They nest usually in a tree cavity 1.5-5 m up. The nest is a cup of moss, dead grass and hair, felted together and lined with finer hair. The female usually lays 9-11 eggs of slightly glossy white colour with purplish-red fine speckles, spots, or small blotches. The eggs are incubated by the female alone for 13-14 days. Both parents feed young on tree-living insects and their larvae. They forage on long thin tree branches, often hanging upside down. Breeding ecology of the species has been poorly studied in Mongolia. The young remain together in family parties after emerging. During seasonal movements and in winter, the species occurs in small groups of 5-20 individuals, feeding on tree seeds and wintering insect larvae in willow forest along large river valleys and forest steppe.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. During seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /

chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Hobby, Northern Goshawk and Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Remizidae

289. Scientific Name: *Remiz coronatus*

Species Authority: (Severtsov, 1873)

Common Names: White-crowned Penduline-tit, Eurasian Penduline Tit or Penduline Tit (English), Burgasny uranshuvuu or uran shuvuu (Mongolian)

Synonyms: *Remiz pendulinus* (Linnaeus, 1758)

Taxonomical Notes: This species was considered as Eurasian Penduline-tit. According to major publications on taxonomy (Sibley&Monroe, 1990&1993; Clements, 2007; BirdLife International, 2004, 2008&2010), White-crowned Penduline-tit occurs in Mongolia. *Remiz pendulinus* (Sibley & Monroe, 1990&1993) has been split into *R. pendulinus* and *R. macronyx* following Harrap & Quinn (1996), who recognize four species of *Remiz*: *pendulinus*, *macronyx*, *coronatus* and *consobrinus*. Eck & Martens (2006) lump *macronyx* with *pendulinus* and *consobrinus* with *coronatus*, citing hybridization between *macronyx* and *pendulinus* on the north and southwest shores of the Caspian Sea as a factor, but they fail to adequately justify their treatment of *R. coronatus* and *R. consobrinus* as conspecific. Examination of specimens and literature by the BirdLife Taxonomic Working Group suggests that the four taxa are best treated as separate species, owing to consistent morphological and ecological differences between them with habitat partitioning occurring where two taxa occur in sympatry (BirdLife International, 2011).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Portugal; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech

Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Mongolia.

Regional Distribution: This species breeds at Khovd River and Achit Lake (Mongol-Altai Mountain Range), south to Bulgan River (Baruunkhurai Depression); lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); Degee, Nömrög Rivers and Ih Khyangan Mountains (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, forested areas, high vegetated open habitats and mountain slopes with bushes in Great Lakes Depression, Mongol-Altai, Khangai, southern Hövsgöl (Eg, Delgermörön River valleys) and Hentii Mountain Ranges, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region; oases and mountains with bushes in Gobi (Dzungar, Trans-Altai, Alashani and SW Eastern Gobi) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in summering and breeding sites by late April-early May. Breeding begins in late May-early June. Breeding habitats are thickets of willow and poplar trees standing in or by water in marshes or river borders, or in scrubby woodland away from water. Nest is suspended from thin twigs at the tip of a branch of a willow, birch or poplar tree above a water surface, or at the tops of trees in deciduous and mixed forests in mountain taiga forest, forest steppe and river valleys and rarely on lakes. The nest may be placed low over water, from c. 0.6-1 m upwards, but elsewhere may be in trees up to c. 10-13 m from ground. The nest is a domed structure with entrance tube; whitish or creamy white in colour. It begins as a pendant fibrous loop, and is then built out as a bag on one side, and extended to a downward-slanting short tube on the other. The walls are of thick strong felted material, formed from plant down, mainly willow and poplar seed, mixed with seed cases and fibres. Built by both birds, taking about 2 weeks. The female usually lays 6-8 eggs of a non-glossy white colour with a pink flush. The female incubates the eggs alone for 13-14 days. Both parents care for and feed young on tree-living insects and their larvae for 16-18 days. In the non-breeding season, it eats nectar, seeds and fruits. The young birds remain in the family party for some weeks after leaving the nest. On migration the species occurs in flocks of 5-60 individuals in deciduous, mixed forests, and dense and tall bushes in taiga forest, forest steppe, river valleys, and planted trees and gardens of towns and cities. They forage in trees and bushes. Breeding and migrating birds leave the country for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Live-stock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting (hunting)-3.4. For Materials -3.5.1. Local trade for cultural/ leisure activities /local people collect its nest due to strong believe/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poi-

soning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Listed in the Mongolian Red Data Book (1997). Approximately 10.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Hirundinidae

290. Scientific Name: *Riparia riparia*

Species Authority: (Linnaeus, 1758)

Common Names: Sand Martin or Bank Swallow (English), Elseg ergiinkharaatsai or ergiin kharaatsai (Mongolian)

Subspecies in Mongolia: *R. r. ijimae*, *R. r. diluta* (see Svensson (1992); Howard & Moore (1994); del Hoyo *et al.* (2004) for further details)

Synonyms: *Hirundo riparia* (Linnaeus, 1758)

Taxonomical Notes: *Riparia/Cotile diluta* (Pale Sand Martin or Pale Martin in English, and Bugeen ergiinkharaatsai in Mongolian) is one of the subspecies of Sand Martin. Taxonomic literatures (Gavrilov&Savchenko, 1991; Goroshko, 1993; Del Hoyo *et al.*, 2004; Loskot, 2006; Schweizer&Aye, 2007; Clements, 2007) have recently considered it as a separate species. The BirdLife Taxonomic Working Group listed the species in the under-review list (BirdLife International, 2011).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands, U.S., Virgin Islands, British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Burkina Faso, France,

Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Armenia, Islamic Republic of Iran, Islamic Republic of Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Khovd River, Khoton and Khorgon Lakes, and Mönh Khaikhan Mountain area (Bortyn Lake) (Mongol-Altai Mountain Range) (except for alpine and subalpine zones and wet meadows); Uvs, Khar-Uus, Khar, Dörgön, Khyargas and Airag Lakes, south to Zereg Valley (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); Tamir, Khanui and upper Orkhon Rivers Ögii, Terhiin Tsagaan, Sangiin Dalai, Telmen and other lakes (Khangai Mountain Range); Hövsgöl Lake and Darkhad Depression (Hövsgöl Mountain Range) (except for taiga forest and dense forested areas); Orkhon-Selenge River basins; Tuul, Terelj, Onon, Balj, and Herlen Rivers (Hentii Mountain Range) (except for taiga forest and dense forested areas); Ulz River in Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög, Azarga, and Galdastai Rivers and Buir, Shavar, Tashgain Tavan, and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan and Taatsyn Tsagaan Lakes (Valley of the Lakes) and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, Eastern Mongolian Plain; Gobi-Altai Mountain Range, Trans-Altai, Alashani, Northern and Eastern Gobi (Kozlova, 1930; Piechocki *et al.*, 1982; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Global Distribution of Pale Sand Martin *Cotile diluta*: Mongolia, Russia, India, South-eastern China, Pakistan and S India.

Regional Distribution of Pale Sand Martin *Cotile diluta*: S.Gombobaatar, German and Japanese team saw two typical *diluta* individuals in Bus Lake in Ereentsav sum of Dornod province in July, 2007 and SE shore of Buir Lake of Dornod province on 19 July, 2009. This species occurs in the valley of Ulz, Khalkh and Nömrög Rivers, and Buir Lake. D. R. Philip, Department of Biology, Faculty of Science at Mahidol University in Bangkok caught a bird by large mesh net for ducks at Khunt Lake of Saikhan sum in Bulgan province (NW Mongolia) on 17 May 2008. Its measurement was the followings; wing length 103 mm (maximum chord), tail length 50 mm and tail fork - 5.5 mm. It weighed 13.0 g. His opinion was that this individual had failed to find an overnight roost and kept going during the night (Philip, 2008). Birds were observed in Khovd town of Khovd province. The species apparently overlaps widely with Sand Martin *Riparia riparia* (A.Bräunlich pers. comm.). Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Population: The global population consists of 50,000,000 mature individuals. Global breeding and resident ranges are estimated at 36,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, Sand Martin is a breeding visitor. They arrive in breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs nest in a burrow in a vertical bank, natural quarry or cliff, in holes of river banks and lake shores with sandy precipices in lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). It is a colonial nester. The nest is placed in a tunnel bored by both adults. The terminal chamber is lined with plant stems,

feathers and similar material. The female usually lays 4-5, sometimes 3-7 eggs of slightly glossy white. Both adults incubate the eggs for 12-16 days. Both parents care for and feed young in the nest cavity at first but later only come to mouth of burrow. They leave the nest at c.19 days. In the non-breeding season, they feed together on flying insects (mosquitoes, flies) in open areas near rivers banks and lake shores. They migrate in flocks consisting of 10-300 individuals. They leave the breeding site for wintering grounds by late August-early September, depending on food and temperature.

Habitat Type: 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.3., 5.4.-5.9., 5.13.-5.16. with banks, precipice, cliffs on migration and breeding as well); 8. Desert (8.2. on migration); 12. Artificial – Aquatic (12.2., 12.6., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /nesting habitats, sandy precipices and banks destroyed by livestock in summer/, 1.3. Extraction-1.3.1. Mining / nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings/, 1.7. Fires /forest fires in spring and autumn dry seasons/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics-8.2. Predators /Domestic cats, Eurasian Eagle-owl and Saker Falcons prey upon it/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Hirundinidae

291. Scientific Name: *Ptyonoprogne rupestris*

Species Authority: Scopoli, 1769

Common Names: Eurasian Crag-martin or Crag Martin (English), Kharagchin kharaatsgai or kharagchin kharaatsai (Mongolian)

Synonyms: *Hirundo rupestris* Scopoli, 1769

Taxonomic Notes: According to the BirdLife Taxonomic Working Group, the species name has changed to *Hirundo rupestris* Scopoli, 1769. Phylogenetic analyses have been published which may affect this species. However, we have not yet accepted this change.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Senegal, Morocco, Mali, Portugal, Spain, Algeria, United Kingdom, Gibraltar, France,

Andorra, Belgium, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Slovenia, Malta, Croatia, Bosnia and Herzegovina, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Bulgaria, Egypt, Turkey, Russian Federation, Cyprus, Ethiopia, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Uzbekistan, Afghanistan, Tajikistan, Kyrgyzstan, China, Nepal, Mongolia, Bhutan.

Regional Distribution: This species breeds in Achit Lake valley, Höh Serh Mountain, from Khovd River to Bulgan River valleys; Tagna, Mönkhkhairhan, Kharkhira and Turgen Mountains, Uyench, Bodonch, and Tsenher River valleys (Mongol-Altai Mountain Range); at Gichgenii nuruu, Ih and Baga Bogd, Gurvansaikhan, Tost, and Nemegt mountains (Gobi-Altai Mountain Range); Jargalant Khaikhan Mountain (Great Lakes Depression); Orig Mountain near Uliastai town (Khangai Mountain Range). A single bird was recorded at Bogd Khaan uul near Ulaanbaatar city (Tseveenmyadag *et al.*, 2005). S.Gombobaatar and Rishad Naoraji, India, photographed a breeding pair of the species at the highest point of the NE Choiryn Bogd Mountain of Gobisumber province on 3 July, 2010. It migrates through the breeding grounds and Hentii Mountain Range, Valley of the Lakes, Baruunkhurai Depression and the Gobi (Trans-Altai, Northern and W Eastern Gobi) (Kozlova, 1930; Sergelen, 1986; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stepanyan, 2003; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 500,000 - 5,000,000 individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding birds arrive in breeding sites by early-mid-May, depending on weather conditions. Breeding season continues from June to August. Breeding pairs build own nest of mud, dried grass and animal hairs in caves and cavities in cliff-faces and vertical rock surfaces or rock faces with an overhang on the sides of rocky valleys and ravines, rocky outcrops or cliffs near water in high mountain areas (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a half-cup, like that of a swallow, stuck to the surface and lined with plant material, down and feathers. The female usually lays 4-5 eggs of slightly glossy white colour with fine sparse red and grey spots, more concentrated at the larger end. The female incubates the eggs for 14 days. Both parents care for and feed the young on flying insects hunted in the air above a water surface. The young leave the nest at c. 25-26 days. They form flocks consisting of 5-20 individuals and feed together in the air. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and air temperature.

Habitat Type: 6. Rocky areas; 7. Caves and Subterranean Habitats (near 7.1. in breeding season).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /due to concentration of livestock at water points near their nesting sites, springs and creeks in high mountain has been drying out/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation / construction of buildings for industrial purposes, tourist resorts, and other buildings/; 4. Accidental mortality-4.1.2. Terrestrial- 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics-8.2. Predators / Common and Lesser Kestrel prey upon it/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private buildings and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 15.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Hirundinidae

292. Scientific Name: *Hirundo rustica*

Species Authority: Linnaeus, 1758

Common Names: Barn Swallow (English), Asryn altankharaatsai or asryn kharaatsai (Mongolian)

Subspecies in Mongolia: *H. r. rustica*, *H. r. gutturalis*, *H. r. tytleri*, *H. r. mandschurica* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Belize, Honduras, Nicaragua, Costa Rica, Cuba, Panama, Cayman Islands, Peru, Ecuador, Jamaica, Columbia, Chile, Haiti, Bahamas, Brazil, Argentina, Venezuela, Turks and Caicos Islands, Dominican Republic, Aruba, Bolivia, Netherlands Antilles, Puerto Rico, Virgin Islands U.S., Virgin Islands British, Paraguay, Anguilla, Saint Kitts and Nevis, Montserrat, Grenada, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Guyana, Falkland Islands (Malvinas), Dominica, 2Saint Vincent and the Grenadines, Martinique, Saint Lucia, Uruguay, Barbados, Suriname, Saint Pierre and Miquelon, French Guiana, Bermuda, Greenland, Iceland, South Georgia and the South Sandwich Islands, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Madagascar, Mayotte, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, British Indian Ocean Territory, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Cocos (Keeling) Islands, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Northern Mariana Islands, Micronesia, Marshall Islands.

Regional Distribution: This species breeds at Achit Lake and Khovd River (Mongol-Altai Mountain Range); Uvs Lake and the delta of Tes and Torkholog Rivers, Ulaangom town, lower Khovd River, Khar-Us, Khar, Dörgön, Khyargas, and Airag Lakes (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii, Terhiin Tsagaan, Telmen, and Khar Lakes and Ider and Chuluut Rivers (Khangai Mountain Range); Hövsgöl Lake

and Eg River (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Terelj, Onon, and Balj Rivers (Hentii Mountain Range); Ulz, Herlen River basins in Mongol Daguur Steppe and Middle Khalkh Steppe; Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, Azarga, and Galdastai Rivers, and Buir, Shavar, Tashgain Tavan and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog and Taatsyn Tsagaan Lakes (Valley of the Lakes) and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, Gobi-Altai Mountain Range and the Gobi (Trans-Altai, Alashani, Northern and Eastern Gobi) (Kozlova, 1930; Piechocki *et al.*, 1982; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008)

Population: The global population consists of 190,000,000 mature individuals. Global breeding and resident ranges are estimated at 51,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and summering birds arrive in their breeding and summering sites by late April-early May. Breeding season continues from May-July. Both adults build own nest of mud, dry grasses, hairs, and bird feathers under bridges, on roofs of buildings, cattle shelters and other man-made structures in forest steppe, mountain steppe, desert steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding habitats are variable, particularly in open areas near water except for taiga forest, high mountain, and Gobi Desert. The nest is an open shallow cup of mud pellets mixed with vegetable fibres and plant fragments, sparsely lined with feathers. The female usually lays 4-5 eggs of glossy white colour with reddish-brown, lilac or pale grey spots. Mainly the female incubates the eggs for 14-16 days. Both parents care for and feed the young on flying insects. The parents bring the food to the young in the throat. They leave the nest after 17-24 days. They stay in flocks both in the air and while perched on wires or dead tree branches in the non-breeding season. They leave the breeding site for wintering grounds by late August -very early September, depending on air temperature and food availability.

Habitat Type: 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9. feeding on migration and in breeding, 5.13.); 6. Rocky areas; 11. Artificial - Terrestrial (11.4., 11.5.); 12. Artificial - Aquatic (12.2., 12.6., 12.7., 12.9. feeding on migration and breeding as well).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /nesting habitats such precipice, river banks, cattle shelter, low bridges and abandoned buildings destroyed by livestock in summer/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /forest and steppe fires burn nesting sites in artificial substrates in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ - 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics- 8.2. Predators /domestic cats and Eurasian Eagle -owl prey upon it/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Hirundinidae

293. Scientific Name: *Hirundo daurica*

Species Authority: Linnaeus, 1771

Common Names: Red-rumped Swallow (English), mongol altakharaatsai or mongol kharaatsai (Mongolian)

Subspecies in Mongolia: *H. d. daurica* (see Svensson (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2004) for further details)

Synonyms: *Cecropis daurica* (Linnaeus, 1771)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Egypt, Eritrea, Ethiopia, Iceland, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Slovenia, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Zambia, Bulgaria, Zimbabwe, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Malawi, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Somalia, Yemen, Islamic Republic of Iran, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Ider and Tes Rivers, Bulnai Mountain, Hövsgöl Mountain Range, Orkhon-Selenge River basins, and Tuul, Onon, Balj Rivers (Hentii Mountain Range) (except for taiga forest), and Khalkh, Nömrög Rivers and Buir, Shavar, and Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas and Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, and Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Piechocki *et al.*, 1982; Sergelen, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. Breeding habitats are open country, where suitable nest-sites are provided by rocky outcrops, cliffs, buildings or bridges, but always in the vicinity of water. The nest is attached to the underside of a horizontal surface such as underside of bridge or other suitable man-made substrate in forest steppe, moun-

tain steppe, and lake and river valleys (Bold *et al.*, 2005). Both adults build the nest, a closed structure built of raised pellets mixed with grass and plant fibre. It is a rounded bowl, built against an overhanging surface, the entrance extended as a spout along the surface. The nest is lined with soft material, feathers or wool. The female usually lays 3-5, rarely 6 eggs of slightly glossy white with very fine reddish-brown specks. Both adults incubate the eggs for 14 -15 days. Both adults care for and feed young on flying insects in the nest. The young leave the nest at 23-25 days. The species feeds on flying insects in the air and over the surface of water. They stay in flocks during flight or while perched on wires, cliff ledges, or dead tree branches. They leave the breeding site for wintering grounds by late August-early September, depending on air temperature and food availability.

Habitat Type: 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9. feeding on migration and in breeding, 5.13.); 6. Rocky areas; 11. Artificial – Terrestrial (11.4., 11.5.); 12. Artificial – Aquatic (12.2., 12.6., 12.7., 12.9. feeding on migration and breeding as well).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /nesting habitats such precipice, river banks, cattle shelter, low bridges and abandoned buildings destroyed by livestock in summer/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /forest and steppe fires burn nesting sites in artificial substrates in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/-4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics- 8.2. Predators /Cats and Eurasian Eagle-owl prey upon it/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on prey abundance/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Hirundinidae

294. Scientific Name: *Delichon urbicum*

Species Authority: (Linnaeus, 1758)

Common Names: Northern House-martin or House Martin (English), Hureenii kharaatsai (Mongolian)

Subspecies in Mongolia: *D. u. lagopoda* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2004) for further details)

Synonyms: *Hirundo urbica* or *Delichon urbica* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, Barbados, Saint Pierre and Miquelon, Bermuda, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, Saint Helena, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Nepal, Mongolia, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Cambodia, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species breeds at Buyant, Khovd, Yolt Rivers and Khoton, Khorgon, Achit, Uureg Lakes; Siilhem, Kharkhiraa, Turgen, Khasagt Khairkhan, and Mönh Khairkhan Mountains (Mongol-Altai Mountain Range); Northern Uvs Depression, Khovd River, Khovd town, Zereg valley, Jargalant Khairkhan (Great Lakes Depression); Zavkhan Desert Steppe Depression; S Shargyn Gobi; Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes (Khangai Mountain Range); Southern Khangai Plateau; Khan Höhii Mountain, Terhiin Tsagaan, Telmen, and Khar Lakes in Tarvagatai-Bulnai Mountains range; Hövsgöl Lake and Eg River (Hövsgöl Mountain Range) (except for dense forest and taiga); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Terelj, Onon, and Balj Rivers (Hentii Mountain Range); Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Khalkh, Degee, Nömrög Rivers and Buir Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes), Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, Gobi-Altai mountain range, and Trans-Altai, Alashain, Northern and Eastern Gobi (Kozlova, 1930; Sergelen, 1986; Piechocki *et al.*, 1982; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Sumiya, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Boldbaatar, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 60,000,000 - 300,000,000 mature individuals. Global breeding and resident ranges are estimated at 26,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding individuals arrive in breeding sites by early-mid-May, depending on weather conditions. Breeding season continues from May-July. Their suitable breeding habitats are in open country, the nest being stuck to the rock surface of outcrop or cliff, under an overhang or on outer walls of a building. Both parents build own nest with mud in cliffs, under bridges, on roof of buildings and other human-made structures in towns, cities, forest steppe, mountain steppe, desert steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They nest in a loose group, sometimes colonial, and nests are contiguously built. The nest is a rounded half-cup built on to a vertical surface, so close to the overhanging projection above that only a narrow entrance is present at the top. The nest is made of mud pellets strengthened with plant fibres and lined with feathers, dry grass stems, and plant fragments. The female usually lays 4-5, sometimes 2-6 eggs of slightly glossy white colour with fine red spots. Both parents incubate the eggs for 13-19 days. Both sexes care for and feed the young on small flying insects. They leave the nest at c.19-25 days. According to Harrison (1975), young of earlier broods may remain

around the site and may help feed young of later broods. They stay in flocks in flight or perched on wires, sitting on ground more often than other swallows. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9. feeding on migration and in breeding, 5.13.); 6. Rocky areas; 11. Artificial – Terrestrial (11.4., 11.5.); 12. Artificial – Aquatic (12.2., 12.6., 12.7., 12.9. feeding on migration and breeding as well).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /nesting habitats such cattle shelter; low bridges and abandoned buildings destroyed by livestock in summer/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /forest and steppe fires burn nesting sites in artificial substrates in spring and autumn dry seasons/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites while they drink water on the ground/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics- 8.2. Predators /cats prey upon it/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on food base/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Hirundinidae

295. Scientific Name: *Delichon dasypus*

Species Authority: (Bonaparte, 1850)

Common Names: Asian House-martin or Kashmir House Martin (English), Tsarmyn kharaatsai (Mongolian)

Subspecies in Mongolia: *D. d. dasypus* (see Howard & Moore (1994) and del Hoyo *et al.* (2004) for further details)

Synonyms: *Chelidon dasypus* (Bonaparte, 1850)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: This species has been assessed as Data Deficient. It is found only in the Hövsgöl area in Northern Mongolia and the population size for Mongolia is unknown; therefore, until further information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation, Pakistan, India, China, Nepal, Mongolia, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Taiwan, Philippines, Japan, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species breeds at Khoridol Saridag and Bayany Nuruu in Hövsgöl Mountain Range (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2003; Boldbaatar, 2005a).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. They might arrive in breeding sites by late early-mid-May the same as other breeding visitors. Breeding season continues from May-July. Migration pattern and behavior, habitats, and breeding ecology are not fully known in Mongolia yet. They nest in colonies sited under an overhang on a vertical cliff or high rock face. The preferred habitat of the Asian House Martin is valleys and gorges in mountainous areas or coastal cliffs, where natural caves or crevices provide nest sites. It will also breed on large man-made sites like temples, hotels or power stations (Turner & Rose, 1989). According to Turner & Rose (1989), the normal clutch is 3-4 (occasionally up to six) plain white eggs. The incubation and fledging times are unknown, but are probably similar to those of the Common House-martin, which has an incubation period of 14 to 19 days until the eggs hatch, and a further 22 to 32 days to fledging. Both sexes build the nest, incubate the eggs and feed the chicks. This martin feeds on insects taken in flight. As with its relatives it tends to feed high in the air, taking mostly small flies and Hymenoptera such as winged ants. A wide range of other insects are caught, including Lepidoptera, beetles and lacewings. The presence in the diet of terrestrial springtails and Lepidoptera larvae indicate that food is sometime picked from the ground (Turner & Rose, 1989). They possibly leave the breeding site for wintering grounds by late August-early September, depending on food availability and air temperature.

Habitat Type: 3. Shrub-land (3.4. on migration); 6. Rocky areas.

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.1.5. Poisoning /use of insecticides against insects in forest/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics- 8.3. Prey and food base /breeding success and number of eggs and chicks depend on food base/; 10. Human disturbance-10.1. Recreation and tourism /construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 22.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Aegithalidae

296. Scientific Name: *Aegithalos caudatus*

Species Authority: (Linnaeus, 1758)

Common Names: Long-tailed Tit (English), Suult höhbukhandai or suult höh bukh (Mongolian)

Subspecies in Mongolia: *A. c. sibiricus* (see Svensson (1992) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire and human disturbance, it has been assessed as Least Concern because the current threats to this

species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Ireland; Portugal; Spain; United Kingdom; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova; Russian Federation; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Kyrgyzstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at N Uvs Lake (Torkholig River delta), Tes River (Great Lakes Depression); Khangai, Hövsgöl and Hentii Mountain Ranges; Orkhon-Selenge River basins; Khalkh, Degee, Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region); Bulgan River (Baruunkhurai Depression). The species occurs in the breeding areas and moves down to forest steppe and river valley of the regions (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 30,000,000 - 150,000,000 mature individuals. Global breeding and resident ranges are estimated at 18,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. It breeds in open woodland, woodland edge, scattered copses, scrub, thickets and thick hedgerows. The nest is placed in trees or thick scrub, 1.5-7 m up, but may also be in conifer trees or in more open trees, usually near the trunk or in a large fork high up (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Occasionally one or two additional birds may help the pair during nesting. The nest is a large, compact domed structure, usually slightly elongated vertically. Two adults build the nest of moss, bound with spiders' webs and hair, coated outside with lichen and thickly lined with feathers. It may take about three weeks to build the nest. The female usually lays 8-12 eggs of glossy white, unmarked, or finely purplish-red spots, sometimes forming a zone around larger end. The eggs are incubated by the female for 12-14 days while the male feeds her. Both parents and helpers care for and feed young for 14-18 days in the nest. They are fed for 10-14 days after leaving the nest. They feed the young on terrestrial invertebrates from trees and bushes. Outside breeding season, they chiefly feed on seeds, berries and other fruits. They occur usually in groups of 4-30 individuals in deciduous, coniferous and mixed forests in taiga forest, forest steppe, lake and river valleys, and gardens in towns and cities during seasonal movements and winter. They are restless while feeding in flocks—flying from tree to tree and into bushes, constantly calling to each other. Agile climber along thin branches, often hanging from them.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13.); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. During seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3.

Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Eurasian Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

297. Scientific Name: *Melanocorypha mongolica*

Species Authority: (Pallas, 1776)

Common Names: Mongolian Lark (English), Mongol boljmor (Mongolian)

Synonyms: *Alauda mongolicus* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation, China, Mongolia.

Regional Distribution: This species breeds at Tes, Khovd Rivers and Uvs, Khar-Uvs, Khar, Dörgön, Khyargas, and Airag Lakes (Great Lakes Depression); Zavkhan Desert Steppe Depression; Khangai and Hövsgöl Mountain Ranges (only lowland and mountain valleys); Orkhon, Selenge, Eg, and Kharaa Rivers (Orkhon-Selenge River basins); Tuul, Onon, and Balj Rivers (Hentii Mountain Range) (does not enter alpine zone, taiga forest); Middle Khalkh and Mongol Daguur Steppe; Eastern Mongolian Plain and Buir Lake-Khalkh River region. The species occurs in breeding areas and mountain valleys in Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine, subalpine zones, taiga, forested areas), Eastern Mongolian Plain, Valley of the Lakes, Baruunkhurai Depression, north of Gobi-Altai Mountain Range, and North of Northern Gobi during seasonal movements in winter (Kozlova, 1930; Piechocki *et al.*, 1982; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Mainjargal,

2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003 Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Mainjargal, 2006; Boldbaatar, 2008; Gombobaatar & Gantulga, 2008; Harness and Gombobaatar, 2008; Gombobaatar *et al.*, 2009a; Gombobaatar *et al.*, 2009b; Amartuvshin *et al.*, 2010).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding season continues from May-July. Both parents build their own nest of dried grasses lined with softer and finer grasses and hairs on the ground. The nest is located behind dried droppings of horses, cattle dung, tussocks, tall grass like *Achnatherum* spp. and short *Caragana* spp. bushes in sparsely vegetated open dry habitats with patchy tall grass, dry lake and river valleys with tall grass and mountain valleys in steppe (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Mainjargal, 2006; Gombobaatar & Gantulga, 2008; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female lays 4-6 eggs of glossy yellowish green or pale olive colour with dark brown, greyish, or reddish-brown speckles and spots. Both sexes, mostly female, incubate the eggs for 12-15 days. Chicks leave the nest at 7-9 days and can fly at 12-15 days. Depending on food availability and weather, they may have a double brood. Intensive body growth rate of chicks of Mongolian Lark was recorded between 3 to 6 days after hatching. Both parents feed young on insects and their larvae and spiders. Average density of the species was 91 individuals / km² in Caragana steppe, 57 individuals in short vegetated steppe, 58 individuals in mountain steppe, and 158 individuals in Ders grass *Achnatherum splendens* valley in the steppe at Darkhan sum of Hentii province in June, 2006 (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008). This was higher than the results of Mainjargal (2003). In the non-breeding season, predominant food is seeds of various plants. They form large flocks consisting of 10-2,500 individuals during seasonal movements. Wintering birds feed on seeds and wintering buds in snowless areas near roads together with Horned Larks and Small Snowfinches.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (near 5.9. on migration, 5.13. on migration); 6. Rocky areas (on migration); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5. on migrations).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in high vegetated areas with *Caragana* spp. bushes and Ders Grass *Achnatherum splendens* (Nevski) were destroyed by livestock in the Central Mongolian steppe (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008)/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /people accidentally shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /seed-eating birds, including in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) in 2002 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010 & 2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks (Gombobaatar & Gantulga, 2008)/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox *Vulpes corsac*, Halys Viper *Gloydius halys* prey upon eggs and young chicks in the nests (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008). This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010)/, 8.3. Prey and food base /breeding success and number of

eggs and chicks depend on the food base/; 10. Human disturbance- 10.1. Recreation and tourism / number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 6.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

298. Scientific Name: *Melanocorypha leucoptera*

Species Authority: (Pallas, 1811)

Common Names: White-winged Lark (English), Tsagaalig boljmor (Mongolian)

Synonyms: *Alauda leucopterus* (Pallas, 1811)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Slovakia, Ukraine, Russian Federation, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Uzbekistan, China, Mongolia. It is considered vagrant in United Kingdom Belgium, Germany, Switzerland, Italy, Austria, Poland, Malta, Serbia, Greece, Romania, Finland, Bulgaria, and Turkey.

Regional Distribution: This species has been recorded in saline soil areas in the valley between Erhil Lake and Khatgal sum of Hövsgöl province and Telmen Lake of Zavkhan province in winter. There are a few uncertain records in Trans-Altai, Alashani and W Eastern Gobi (Fomin & Bold, 1991; Sumiya & Skryabin, 1989; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Sumiya, 2006).

Population: The global population consists of 120,000 - 800,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. It is a fairly common species in Kazakhstan. Well-documented wintering records were in areas of Hövsgöl and Zavkhan provinces. According to MacKinnon & Phillipps (2000), they inhabit high salinity, feather-grass steppe, and saline soil areas. Its diet consists of seeds and insects during the breeding season. It feeds on seeds in gregarious flocks during winter. Mongolia is at the eastern limit of the species' distribution in the world. According to habitats, feeding ecology and distribution limit of the species, it may winter in the Great Lakes Valley including Uvs Lake Depression and northern Khangai Mountain plateau in small numbers.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (feeding near 5.9. on migration, 5.13. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining (wintering habitats affected by gold and other mining activities), 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at wintering sites/; 4. Accidental mortality- 4.2. Collision-4.2.1. Pylon and building collision / this is a potential threat to the species/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.2. Storms /see 6.1.1./, 7.3. Temperature extremes /overcooling/, 8.3. Prey and food base /lack of food

and snow drift/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, this species wintered in some protected areas including, Khar-Uus and Uvs Lakes and Important Birds Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

299. Scientific Name: *Melanocorypha yeltoniensis*

Species Authority: (Forster, 1767)

Common Names: Black Lark (English), Kharaldai boljmor (Mongolian)

Synonyms: *Alauda yeltoniensis* (Forster, 1767)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Uzbekistan, Kyrgyzstan. It is considered vagrant in Belgium, Germany, Italy, Austria, Sweden, Poland, Malta, Finland, Ukraine Lebanon, and Mongolia.

Regional Distribution: M. Stubbe observed a flock of 15 (incl. 2 ad. males only, one of which was collected) at the northern shore of Khar-Uus Lake of Dörgön sum in Khovd province on 14 February, 1980 (Piechocki *et al.*, 1982; Dawaa *et al.*, 1994).

Population: The global population consists of 50,000 - 420,000 mature individuals. Global breeding and resident ranges are estimated at 2,090,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There is only one record in the Great Lakes Depression. This species has a large global population, including an estimated 4,000-7,000 pairs in Europe, in south-eastern European Russia, which accounts for less than a quarter of its global range. Populations in the most suitable habitat in central Kazakhstan have been estimated to be in the “hundreds of thousands, and maybe even millions of breeding pairs” (BirdLife International, 2011). This species possibly winters in the Great Lakes Depression and Uvs Lake basin of Mongolia. This is a bird of open steppe, often near water. They feed on seeds gregariously in winter.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (feeding near 5.9. on migration, 5.13. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining (wintering habitats affected by gold and other mining activities), 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at wintering sites/; 4. Accidental mortality- 4.2. Collision-4.2.1. Pylon and building collision / this is a potential threat to the species/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.2.

Storms /see 6.1.1./, 7.3. Temperature extremes /overcooling/, 8.3. Prey and food base /lack of food and snow drift/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, this species possibly winters in protected areas (Khar-Uus and Uvs Lakes) and Important Birds Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

300. Scientific Name: *Calandrella brachydactyla*

Species Authority: (Leisler, 1814)

Common Names: Greater Short-toed Lark (English), Talyn jirgemel or byalzuumar (Mongolian)

Subspecies in Mongolia: *C. b. longipennis* (see Svensson (1992) and del Hoyo *et al.* (2004) for further details)

Synonyms: *Calandrella cinerea* Gmelin, 1789; *Alauda brachydactyla* (Leisler, 1814)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Iceland, Senegal, Western Sahara, Mauritania, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, Burkina Faso, France, Niger, Belgium, Nigeria, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Sweden, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Sudan, Ukraine, Bulgaria, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Kenya, Republic of Korea, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Democratic People's Republic of Korea, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Mongolia, Bangladesh, Bhutan, Myanmar, Japan.

Regional Distribution: This species breeds in the valleys of the Great Lakes Depression; Tes River and Boorog Del Els (Great Lakes Depression); Ongi and Tui Rivers, and Sangiin Dalai and Töhöm Lakes (Khangai Mountain Range), Orog, Bööntsagaan and Taatsyn Tsagaan Lakes (The Valley of the Lakes), Mongolian and Gobi Altai mountain ranges; Bulgan River (Baruun Khurai Depression); Orkhon, Selenge Rivers (Orkhon-Selenge River basins), Onon, Tuul, Herlen and Ulz Rivers (Hentii Mountain Range), near Khan Bogd of Ömnögobi province, Khalkh River and Buir, Shavar and Tashgain Tavan Lakes, and Erdenetsagaan (Buir Lake-Khalkh River-Khyangan region) (Berezovskii, 1881; Tugarinov, 1916; Tugarinov, 1929; Kozlova, 1930; Tarasov, 1960; Piechocki & Bolod, 1972; Mauersberger, 1980&1982; Piechocki *et al.*, 1982; Potapov, 1986; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Mainjargal, 2006; Boldbaatar, 2008; Gombobaatar & Gantulga, 2008; Harness and Gombobaatar, 2008; Gombobaatar *et al.*, 2009a; Gombobaatar *et al.*, 2009b; Amartuvshin *et al.*, 2010). It migrates through the breeding areas and dry habitats in Valley of the Lakes, Northern and Eastern Gobi.

Population: The global population consists of 100,000,000 - 1,000,000,000 mature individuals (Bird-Life International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and a partial migrant. Most individuals arrive in breeding sites by late April-early May. Breeding season continues from May-July. It nests on the ground near tall grasses and tussocks in open short vegetated dry steppe with patches of tall grasses and bushes in mountain steppe, Caragana steppe, lake and river valleys, mountain valleys, rarely in forest edge steppe (Bold *et al.*, 2005; Mainjargal, 2006; Gombobaatar & Gantulga, 2008; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a deep cup built into a hollow, of dry grasses, stems and roots, lined with down, hair, wool and feathers. The female usually lays 3-5, rarely 6 eggs of glossy white, yellowish or olive colour with light brown, greyish, or reddish-brown fine speckles, spots and other markings around the larger end. Both sexes, but mostly the female, incubate the eggs for 10-14 days. They leave the nest at 6-9 days, beginning to fly at 11-12 days. Intensive body growth rate of chicks of Greater Short-toed Lark was recorded between 3 to 6 days after hatching. Average density of the species was 5 individuals / km² in short vegetated steppe, and 246 individuals / km² in Ders Grass *Achnatherum splendens* valley at Darkhan sum of Hentii province in June, 2006 (Gantulga & Gombobaatar, 2006; Mainjargal, 2006; Gombobaatar & Gantulga, 2008). Most individuals leave the breeding site for wintering grounds by late early September-early October, depending on food availability, snowfall and air temperature. They form large flocks consisting of 10-500 individuals and join with other larks such as Horned Lark, Skylark and Mongolian Lark. A few individuals winter in open steppe, depending on air temperature, snow cover, and seed abundance.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (near 5.9. on migration, 5.13. on migration); 6. Rocky areas (on migration); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5. on migrations).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in high vegetated areas with *Caragana* spp. bushes and Ders Grass *Achnatherum splendens* (Nevski) were destroyed by livestock in the Central Mongolian steppe (Gombobaatar & Gantulga, 2008)/, 1.3. Extraction-1.3.1. Mining/nestinghabitatsareaffectedbygoldandotherminingactivities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires/; 4. Accidental mortality- 4.1.1.5. Poisoning /seed-eating birds, including in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) in 2002 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks (Gombobaatar & Gantulga, 2008)/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*), and Halys Viper (*Gloydus halys*) prey upon eggs and young chicks in the nests (Gombobaatar & Gantulga, 2008). This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uganbayar & Gombobaatar, 2010)/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on the food base/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes
Family: Alaudidae

301. Scientific Name: *Calandrella rufescens*

Species Authority: (Vieillot, 1820)

Common Names: Lesser Short-toed Lark (English), Orog jirgemel or orog bor byalzuumar (Mongolian)

Subspecies in Mongolia: *C. r. seebohmi*, *C. r. beicki*, *C. r. cheleensis* (see del Hoyo *et al.*, 2004 for further details)

Synonyms: *Alauda rufescens* (Vieillot, 1820)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Western Sahara, Mauritania, Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Gibraltar, Netherlands, Norway, Germany, Switzerland, Italy, Tunisia, Libyan Arab Jamahiriya, Sweden, Malta, Serbia, Romania, Finland, Ukraine, Bulgaria, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Pakistan, Mongolia.

Regional Distribution: Most historical and recent references and field observations were doubtful due to taxonomical changes, misidentification and confusion with other Short-toed Larks. We have decided to cite only well-documented records and the species' specimen collection at the MAS and NUM in this book. It breeds in Altan Els and Boorog Del Els (Uvs Depression), Chono Kharaiikh River and Khar-Us Lake (Great Lakes Depression), Orog Lake (The Valley of the Lakes), delta of Ulz River (Dornod province) (Kozlova, 1930; Sushkin, 1938; Kozlova, 1975; Mainjargal, 2006), Bayan Tooroi and Zakhui Zarman Gobi (Sumiya, 1990). This species might migrate through the breeding areas, therefore Dawaa *et al.* (1994) illustrated its distribution map including the Great Lakes Depression, the Valley of the Lakes and all of the Gobi Desert. Further information on taxonomy, distribution and migration is urgently required.

Population: The global population consists of 10,000,000 - 50,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. It nests in dry open habitats with tall sparsely vegetated sandy and saline soils, protected by a tuft of vegetation, in mountain steppe, desert steppe and lake and river valleys (Bold *et al.*, 2005; Mainjargal, 2006). According to Harrison (1975), the female usually lays 3-4, sometimes 5 eggs of glossy white, yellowish or olive colour with light brown, greyish, or reddish-brown fine speckles, and spots. The female incubates the eggs for 12 days. Young leave nest at 13 days and can fly at 16-18 days. Both adults and young feed on seeds of various plants. Some individuals winter in the Great Lakes Depression and the Valley of Lakes, depending on snow cover and food (Mainjargal, 2006; S.Gombobaatar pers. comm.). They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (feeding near 5.9. on migration, 5.13. on migration); 8. Desert (8.2., 8.3.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /nesting habitats destroyed by livestock/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1.1.5. Poisoning /seed-eating birds in the steppe feed on the grain mixed with Bromadilone (rodenticide) in 2002 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*) and Halys Viper (*Gloydius halys*) are potential predators/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on the food base/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species. Approximately more than 10% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

302. Scientific Name: *Calandrella cheleensis*

Species Authority: (Swinhoe, 1871)

Common Names: Asian Short-toed Lark or Mongolian Short-toed Lark (English), Dersnii jirgemel or dersnii byalzuumar (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Turkey, Russian Federation, Iraq, Islamic Republic of Iran, Kazakhstan, Turkmenistan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan. It is considered vagrant in Pakistan, India, Myanmar.

Regional Distribution: This species breeds in Mongol-Altai and Gobi-Altai Mountain Ranges; valleys of Uvs, Khar-Uus, Khar, Dörgön, Khyargas, and Airag Lakes and Tes, Khovd River (Great Lakes Depression); Zavkhan Desert Steppe Depression; Tamir, Khanui and upper Orkhon Rivers, and Sangiin Dalai and Ögii Lakes (south-eastern and north-eastern Khangai Mountain Range); Southern Khangai Plateau; Tarvagatai and Bulnai Mountains; Hövsgöl Mountain Range; Tuul, Onon, and Balj Rivers (Hentii Mountain Range); Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Khalkh River and Buir, Shavar, and Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Valley of the Lakes; Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas and Trans-Altai, Northern

and Eastern Gobi (Kozlova, 1930; Piechocki *et al.*, 1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Mainjargal, 2006; Gombobaatar & Gantulga, 2008; Harness and Gombobaatar, 2008; Gombobaatar *et al.*, 2009a; Gombobaatar *et al.*, 2009b; Amartuvshin *et al.*, 2010).

Population: The global population is unknown (BirdLife International, 2011). The global population size has not been quantified. In Europe, the breeding population is estimated to number 10,000-30,000 breeding pairs, equating to 30,000-90,000 individuals (BirdLife International, 2004). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and partial migrant. Most breeding and non-breeding visitors arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. They inhabit open habitats such as all types of steppe, lake and river valleys, and Gobi Desert. Breeding pairs nest on the ground, covered by tall grasses, short *Caragana* spp. bushes, and tussocks in open arid and saline-marshy habitats with short and sparse vegetation in steppe, desert steppe and Gobi Desert including *Caragana* steppe, plains and depressions of lakes (Bold *et al.*, 2005; Mainjargal, 2006; Gombobaatar & Gantulga, 2008; Gombobaatar, 2012). Nest is built of dried grasses and lined with softer and finer grasses and hairs. Female lays 2-4 eggs of glossy yellowish or olive colour with brown, greyish, or reddish-brown speckles, and spots. Both sexes, mostly female, incubate the eggs for 12-15 days. Young can fly at 11-12 days. Both parents feed young on insects and their larvae, spiders, and earthworms (Gantulga & Gombobaatar, 2006; Mainjargal, 2006; Gombobaatar & Gantulga, 2008). In the non-breeding season, their major food is seeds and buds of various plants. They form large flocks consisting of 6-200 individuals. Few individuals winter in open steppe depending on air temperature, snow cover, and seed abundance. Most individuals leave the breeding site for wintering grounds by late early September-early October, depending on food availability, snowfall and air temperature (Mainjargal, 2006; Gombobaatar & Gantulga, 2008).

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (near 5.9. on migration, 5.13. on migration); 6. Rocky areas (on migration); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5. on migrations).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in high vegetated areas with *Caragana* spp. bushes and Ders Grass *Achnatherum splendens* (Nevski) were destroyed by livestock in the Central Mongolian steppe (Gombobaatar & Gantulga, 2008)/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation / construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /people accidentally shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /seed-eating birds, including in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) in 2002 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks (Gombobaatar & Gantulga, 2008)/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*), Halys Viper (*Gloydius halys*) prey upon eggs and young chicks in the nests (Gombobaatar & Gantulga, 2008). This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010)/, 8.3.

Prey and food base /breeding success and number of eggs and chicks depend on the food base/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 17.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

303. Scientific Name: *Galerida cristata*

Species Authority: (Linnaeus, 1758)

Common Names: Crested Lark (English), Sogsoot bojirgo or sogsoot boljmor (Mongolian)

Subspecies in Mongolia: *G. c. magna*, *G. c. leautungensis* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2004) for further details)

Synonyms: *Alauda cristata* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Morocco, Sierra Leone, Mali, Portugal, Spain, Algeria, United Kingdom, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Democratic People's Republic of Korea, Republic of Korea.

Regional Distribution: This species breeds at Baruunkhurai to Northern and Eastern Gobi, mountain valleys in Gobi-Altai Mountain Range, Valley of the Lakes, east to Baruun-Urt town (Sukhbaatar province), Ongon and Moltsoog els. The species occurs in the breeding areas, Mongol-Altai, Great Lakes Depression, Orkhon and Tuul River valleys, Öndörkhaan town in Herlen River valley, and near Ulaanbaatar city during seasonal movements (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005).

Population: The global population consists of 20,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 28,500,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder and a partial migrant. Some breeding individuals arrive in the breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May to September. It breeds in open, bare rocky or sandy areas of desert steppe and Gobi Desert. It nests on the ground, on waste bordering tracks or in crops with sparse vegetation in desert steppe and Gobi Desert (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a cup built into a hollow. The hollow is dug by parents if none available. The nest is a loose construction of dry grasses and other plants, with a finer lining of grass and hair. Female lays 3-5, sometimes 6 eggs of glossy, greyish-white or buffish-white colour with yellowish or buffish-brown and pale grey fine spots, blotches or speckles. The eggs are incubated by the female only for 12-13 days. Both adults care for and feed the young on seeds, buds and insects. The young leave the nest before flying at 9-11 days. In winter, they feed on seeds of various plants. Migrants leave the breeding site for wintering grounds by late September-early October, depending on food availability and weather conditions. Some individuals winter, depending on snow cover and available seeds in the field together with Horned Lark, Mongolian Lark and Short-toed Lark. In winter, some individuals move to urban areas and planted trees.

Habitat Type: 4. Grassland (4.4. During seasonal movements and migration); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5. During seasonal movements and migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /nesting habitats destroyed by livestock/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires/; 4. Accidental mortality- 4.1.1.5. Poisoning /use of rodenticide against Brandt's Vole in the steppe/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks, even adults/; 8. Changes in native species dynamics- 8.2. Predators /some raptors including Saker Falcon and Peregrine Falcon prey upon it/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on the food base/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 14.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

304. Scientific Name: *Alauda arvensis*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Skylark, Skylark or Common Skylark (English), Borolzoi bogshirgo or borolzoi boljmor (Mongolian)

Subspecies in Mongolia: *A. a. kiborti*, *A. a. intermedia*, *A. a. pekinensis*, *A. a. dulcivox* (see Howard & Moore (1994) and del Hoyo *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, Morocco, Ireland, Portugal, Spain, Algeria, Faroe Islands, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Bulgaria, Estonia, Belarus, Egypt, Moldova, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Mongolia, Democratic People's Republic of Korea, Republic of Korea, Japan. It has been introduced to Australia, New Zealand and is considered vagrant in Bermuda, Chad, Hong Kong, Mauritania, Svalbard and Jan Mayen.

Regional Distribution: This species breeds at Tolbo, Achit and Uureg Lakes (Mongol-Altai Mountain Range); Ih Bogd Mountain valleys (Gobi-Altai Mountain Range); Zavkhan River, Zereg Depression and Tes and Torkholig, Khovd, and Buyant Rivers and Uvs, Khar-Us, Khar, Dörgön, Khyargas, and Airag Lakes (Great Lakes Depression); Zavkhan Desert Steppe Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine zone, taiga and forest); Orkhon-Selenge River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas and Trans-Altai, Northern and Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Gombobaatar & Gantulga, 2008).

Population: The global population consists of 250,000,000 - 1,000,000,000 mature individuals. Global breeding and resident ranges are estimated at 26,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and summering individuals arrive in breeding sites by mid-April-early May, depending on weather conditions. Breeding season continues from May-July. Breeding habitats are open moist habitats near rivers and lake valleys, slightly wet meadows, and wheat fields in high mountains, forest steppe, mountain steppe, plains and lake and river valleys (Sumiya & Skryabin, 1989; Bold *et al.*, 2005; Mainjargal, 2006; Gombobaatar & Gantulga, 2008; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build own nest on the ground. The nest is a shallow cup of grasses lined with finer grasses and hairs. Occasionally small pebbles are placed around nests in more open sites. The female usually lays 3-4, sometimes 5, rarely 7 eggs of slightly glossy dull greyish-white or tinted buff or greenish colour with brown or olive, tending to obscure ground coloured spots and blotches. The female incubates the eggs for 11-12 days. Hatchlings leave the nest at 8-10 days. Both parents care for and feed the young on insects and their larvae, spiders and terrestrial invertebrates. They can fly well at c.20 days. Average density of the species was 11 individuals / km² in Caragana steppe, 17 individuals / km² in mountain steppe, 8 individuals / km² in ders grass *Achnatherum splendens* valley at Darkhan sum of Hentii province in June, 2006. They form flocks consisting of 6-100 individuals in the steppe during non-breeding and migration (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008). In the non-breeding season they feed on arthropods and seeds. Small to large flocks join with Short-toed Larks in steppe. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (5.1. -5.9., 5.13. during seasonal movements and feeding); 6. Rocky areas; 8. Desert (8.2., 8.3. during seasonal movements); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. during seasonal movements); 12. Artificial - Aquatic (12.2., 12.6., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in wet meadows, edges of marshes and wetlands, and tall vegetated areas near rivers and lakes destroyed by livestock (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008)/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation / construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /people accidentally shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /seed-eating birds, including in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) in 2002 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks (Gombobaatar & Gantulga, 2008)/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*), Halys Viper (*Gloydus halys*) prey upon eggs and young chicks in the nests (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008). This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uganbayar & Gombobaatar, 2010)/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on the food base/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Alaudidae

305. Scientific Name: *Eremophila alpestris*

Species Authority: (Linnaeus, 1758)

Common Names: Horned Lark or Shore Lark (English), Shooron evertboljmor or shooron alag boljmor (Mongolian)

Subspecies in Mongolia: *E. a. brandti*, *E. a. flava* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2004) for further details)

Synonyms: *Alauda alpestris* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Mexico, Columbia, Saint Pierre and Miquelon, Bermuda, Iceland, Morocco, Ireland, Spain, United Kingdom, Faroe Islands, France, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Denmark, Austria, Svalbard and Jan Mayen, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Ukraine, Bulgaria, Belarus, Turkey, Russian Federation, Israel, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bhutan, Japan.

Regional Distribution: This species nests almost all over Mongolia (except for alpine zone, dense taiga forest, wetlands and forested areas) (Sumiya&Skryabin, 1989; Bold *et al.*, 2005; Gantulga & Gombobaatar, 2006; Mainjargal, 2006; Gombobaatar& Gantulga, 2008; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). It breeds in Mongol-Altai Mountain Ranges up to 3,500 m asl, Gobi-Altai at 3,000 m asl, and Khangai Mountain Range at 2,500 m asl. The species occurs in all natural zones and belts in Mongolia excluding alpine, taiga zones and forested areas during seasonal movements in winter (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008; Gombobaatar& Gantulga, 2008).

Population: The global population consists of 140,000,000 mature individuals. Global breeding and resident ranges are estimated at 33,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. It is a solitary nester. Breeding pairs nest on the ground under tussocks, tall grasses and short bushes in open habitats in high mountain (sub-alpine meadows and rocky mountains), forest steppe, plains, desert steppes, mountain valleys, rivers and lakes. Its nest is in a hollow in the shelter of a plant tuft or stone. The nest is a cup of dry grass and plant stems, loosely put together, with a finer inner lining of plant down and hair. The female usually lays 4, sometimes 2-7 eggs of glossy pale greenish- white with fine buffish-brown speckles, and a blackish hairline. The female incubates the eggs for 10-14 days. Both parents care for and feed young on insects and their larvae, spiders and worms. They leave the nest at 9-12 days and can fly 3-5 days later (Gantulga & Gombobaatar, 2006; Gombobaatar& Gantulga, 2008). Average density of the species was 37 individuals / km² in Caragana steppe, 45 individuals in short vegetated steppe, 28 individuals in mountain steppe, 59 individuals in ders grass *Achnatherum splendens* valley in the steppe, and 5 individuals in mountain slopes in the steppe at Darkhan sum of Hentii province in June, 2006 (Gantulga & Gombobaatar, 2006; Gombobaatar& Gantulga, 2008). In the non-breeding season, their dominant food is seeds of various plants. They form large flocks consisting of more than 100-1500 individuals in late autumn and winter. The large flocks join with Mongolian Larks, feed and move in thin snow areas such as road sides, near livestock tracks and fields along mountain valleys and rivers in mountain steppe, desert steppe and plains.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (5.1. -5.9., 5.13. during seasonal movements and feeding); 6. Rocky areas; 8. Desert (8.2., 8.3. during seasonal movements); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. during seasonal movements); 12. Artificial - Aquatic (12.2., 12.6., 12.9. on migration and in winter).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nests in high vegetated areas with *Caragana* spp. bushes and Ders grass *Achnatherum splendens* (Nevski) were destroyed by livestock in the Central Mongolian steppe (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008)/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires/; 3. Harvesting (hunting or gathering)- 3.5. Cultural,

scientific and leisure activities- 3.5.1. Subsistence use and local trade /people accidentally shoot this species/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /seed-eating birds, including in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) in 2002 (Batdelger, 2002; Gombobaatar *et al.*, 2003; Tseveenmyadag *et al.*, 2005)/, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars accidentally hit them near breeding sites/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought-7.2. Storms /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks (Gombobaatar & Gantulga, 2008)/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*), Halys Viper (*Gloydus halys*) prey upon eggs and young chicks in the nests (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008). This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010)/, 8.3. Prey and food base /breeding success and number of eggs and chicks depend on the food base/; 10. Human disturbance- 10.1. Recreation and tourism /number of breeding pairs has been declining due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Cisticolidae

306. Scientific Name: *Rhopophilus pekinensis*

Species Authority: (Swinhoe, 1868)

Common Names: White-browed Chinese Warbler, Chinese Hill Warbler, or Peking Warbler (English), Butny sond (Mongolian)

Subspecies in Mongolia: *R. p. pekinensis* (see Howard & Moore (1994) and Dawaa *et al.* (1994) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: China; Mongolia; Democratic People's Republic of Korea; Republic of Korea.

Regional Distribution: A.G. Bannikov (Russian mammalogist) observed two birds at Shar Khulstai (Shar Khulsny) oases in Gobi-Altai province in July and August, 1943 (Bold *et al.*, 1983; Fomin & Bold, 1991; Dawaa *et al.*, 1994) and listed in the list of birds in Mongolia as a vagrant (Bold *et al.*, 2002; Bold *et al.*, 2007; Gombobaatar, 2009).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. Only two individuals were observed in reeds of Shar Khuls oases in July. Since this record, it has not been recorded in Mongolia. According to del Hoyo *et al.* (2007), it inhabits dry stone mountain scrub, long grass, bush-covered hill slopes and reed clumps. It feeds probably on invertebrates. It forages in vegetation but is also often seen running on the ground. Outside breeding season, the species occurs in flocks.

Habitat Type: Potential habitats are 3. Shrub-land (3.4. only on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. only on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging, 1.7. Fires; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species. This species possibly migrates through Mongolian protected areas /Great Gobi Strictly Protected Area "A"/ and Important Bird Areas in the south.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Pycnonotidae

307. Scientific Name: *Pycnonotus flavescens*

Species Authority: Blyth, 1845

Common Names: Flavescent Bulbul or Blyth's Bulbul (English), Ukhaa bölböl or saaral bölböl (Mongolian)

Subspecies in Mongolia: *P. f. vividus* (see Howard & Moore (1994) and Dawaa *et al.* (1994) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: India; China; Mongolia; Bangladesh; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam.

Regional Distribution: K.E. Michailov found a single bird in planted poplar trees 50 km N of Khanbogd sum of Ömnögobi province on 3 September, 1978 (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Bold *et al.*, 2002; Bold *et al.*, 2007).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species possibly migrates through southern Mongolia on migration. Only one documented record has been reported in southern Mongolia. According to del Hoyo *et al.* (2005), the species occurs in forested areas and planted trees in towns and cities. Diet of the species consists predominantly of berries and other fruits. They forage in trees and also on the ground in flocks. It is a resident breeder in most of South Asia.

Habitat Type: Potential habitats are 3. Shrub-land (3.4. only on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: Potential dominant threats follow:

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.7. Fires; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. The species migrates through Mongolian protected areas and Important Bird Areas in the south.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

308. Scientific Name: *Bradypterus thoracicus*

Species Authority: (Blyth, 1845)

Common Names: Spotted Bush-warbler (English), Khurgan tsookhondoi (Mongolian)

Subspecies in Mongolia: *B. t. przewalskii* (see del Hoyo *et al.* (2006) for further details)

Synonyms: *Dumeticola thoracica* (Blyth, 1845)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The regional population is unknown and breeding records are uncertain, therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; India; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Lao People's Democratic Republic; Democratic People's Republic of Korea. It is considered vagrant in Bangladesh.

Regional Distribution: This species nests in and migrates through under-growth and thickets in forest meadows, mountain plains with thick grass, dense bushes and scrub at the edge of mountain taiga forest, and river valleys in forest steppe. According to Tseveenmyadag & Bold (2006), it breeds in Khangai, Hövsgöl, Hentii and Ih Khyangan Mountain ranges.

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April - mid-May. Breeding begins in late May-early June. Migration and breeding ecology of the species has not been fully documented for Mongolia. According to Oates (1889-1890), breeding pairs nest in thick coniferous and mixed forest clearings with undergrowth, dense bushes and thickets. They run through dense scrub and bushes like mice. Breeding pairs build their nest low in bushes and scrub in densely vegetated areas. The nest is a cup loosely made of dry leaves and grass. Female lays 3-4 eggs of white with purplish-red spots and specks. Duration of incubation and fledging is unknown in Mongolia. They feed on terrestrial arthropods and their larvae, including flies, beetles, ants and spiders. On migration, individuals occur in dense vegetated areas in river valleys and mountains, forest edges and forest

steppe. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration).

Dominant threats: Potential dominant threats follow:

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought. Horses, cows, sheep and goats destroy nests containing eggs and nestlings in low bushes in Hentii and Khangai areas/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Sparrow Hawk and Eurasian Badger (*Meles meles*) prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 18.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

309. Scientific Name: *Bradypterus tacsanowskii*

Species Authority: (Swinhoe, 1871)

Common Names: Chinese Bush-warbler (English), Shiver tsookhondoi (Mongolian)

Synonyms: *Locustella tacsanowskii* (Swinhoe, 1871)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; India; China; Nepal; Mongolia; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam.

Regional Distribution: This species breeds in upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai and Herlen Rivers (Hentii Mountain Range) and upper Ulz River. It may nest in Degee, Nömrög, and Azarga River valleys (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002& 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). Two adult birds were seen and photographed underneath the pylon near ground-well at SE Darkhan sum of Hentii province on 6 June, 2009 (S.Gombobaatar & P.Amartuvshin pers. comm.).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating individuals arrive in breeding and summering sites by late April-early May. Breeding begins in late May-early June. Late migrants were seen in the steppe by late June. Breeding pairs nest in dense thickets, in meadows, and dry plains with lush grass, dense bushes and scrub at the edge of mountain taiga forest, and river valleys in forest steppe (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is placed low, almost on the ground, in bushes and scrub. The nest is a bulky cup of plant stems, dried grasses and leaves, lined with softer grasses and stems. Female lays 2-3 eggs of whitish, or pink-tinged white colour with red brown, dark brown, or chestnut brown blotches, spots and markings. Duration of incubation and fledging is unknown in Mongolia. They feed on terrestrial arthropods including beetles, ants, flies and others on forest floor and dense bushes. It forages on the ground, rarely in bushes. On migration individuals occur in dense and high vegetated areas in forest, forest steppe, river and lake valleys, open steppe, and human-made substrates such as fences, cattle shelters etc. They leave the breeding site for wintering grounds by late August-early September, depending on food availability, and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1., 5.3. with coniferous and mixed forest, bushes and scrub on migration and feeding, 5.9. only on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /life stock in the forest and forest steppe graze near forest edge and low bushy areas, and also shelter underneath trees with bushes where the species breed. Horses, cows, sheep and goats destroy nests containing eggs and nestlings in low bushes in the regions. Livestock is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby, Eurasian Sparrow Hawk and Red Fox (*Vulpes vulpes*) prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breed-

ing seasons/; 10. Human disturbance- 10.1. Recreation and tourism /forest thickets in Terelj of Hentii Mountain used to be important breeding sites for the species. Due to construction of tourist camps and development of tourism, most breeding pairs have been disappearing in these areas/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 24.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

310. Scientific Name: *Megalurus pryeri*

Species Authority: Seebohm, 1884

Common Names: Marsh Grassbird, Sedge Grassbird or Japanese Marsh Warbler (English), Naran ajindar or naran okhil byalzuukhai (Mongolian)

Subspecies in Mongolia: *M. p. sinensis* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2006) for further details)

Synonym: *Locustella pryeri* Seebohm, 1884 (BirdLife International, 2011)

Taxonomical note: Most taxonomical references consider this species to belong to genera, *Megalurus*: *Megalurus pryeri* (Collar & Andrew, 1988); *Megalurus pryeri* (Collar *et al.*, 1994); *Megalurus pryeri* (BirdLife International, 2000 & 2004); *Megalurus pryeri* (Sibley & Monroe, 1990 & 1993).

Global Status: Near Threatened

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The regional population is unknown and breeding records are uncertain, therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; China; Mongolia; Republic of Korea; Japan.

Regional Distribution: M.I. Golovushkin and S.I. Smirenskii found several birds at the mouth of Ulz River in Hentii province and Khalkh River of Dornod province (Dawaa *et al.*, 1994). It has only been recorded in eastern Mongolia as a very rare summer visitor, with records (by province) as follows: summer visitor in Dornod Mongol Daguur Strictly Protected Area, and Nömrög Strictly Protected Area (breeding not confirmed) (Tseveenmyadag, 1998; BirdLife International, 2001). S.Gombobaatar, Ch.Uuganbayar, P.Amartuvshin from the Mongolian Ornithological Society, and Dr. Bernd Nicolai and his team from the Museum Heineanum in Halberstadt of Germany found 6 males in tall sedge grassy areas near reed beds at Tashgain Tavan Lake (the north-western largest lake of the lake complex with reed beds, and tall reeds to the left of the lake), Dornod province on 24 July, 2009. Three different males were flight-singing and diving into tall grasses. It was a bit late for breeding. However, at least three pairs possibly breed there and all three birds were photographed (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 10,000 - 15,000 mature individuals. Global breeding and resident ranges are estimated at 306,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is most likely breeding visitor in eastern Mongolia. Most of the breeding individuals arrive in breeding sites by late April-early May. Breeding begins in late May-early June. Breeding birds inhabit dense sedge grasses, mid-height reeds and marsh grasses in shallow water for nesting. According to BirdLife International (2011), it is very sensitive to habitat structure and does not tolerate vegetation that is too short or too tall. Breeding and migration ecology is unknown in Mongolia. They feed on terrestrial and aquatic insects and their larvae, sometimes spiders. Seeds of grasses and sedges are important diet in autumn and wintering ground (del Hoyo *et al.*, 2006). On migration, individuals occur in reed beds and tall grasses in the lake and river valleys. It leaves its possible breeding site for wintering grounds by late August-early September.

Habitat Type: 3. Shrub-land (3.4. only on migration); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with marshes, 5.4., 5.7. possible in breeding 5.16. only on migration).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and possible breeding sites of the species is a cause of habitat degradation associated with drought/, 1.7. Fires /steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and possible breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby, Eurasian Sparrow Hawk, Eurasian Badger (*Meles meles*) and Grey Wolf (*Canis lupus*) prey on the species/, 9. Intrinsic factors- 9.5. Low densities -9.9. Restricted range /these factors always negatively affect the number of this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It migrates through eastern Mongolian protected areas such as Nömrög and Mongol Daguur Strictly Protected Areas and Important Bird Areas in the region.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

311. Scientific Name: *Locustella lanceolata*

Species Authority: (Temminck, 1840)

Common Names: Lanceolated Warbler, Lanceolated Grasshopper Warbler or Temminck's Grasshopper Warbler (English), Bidert shatansuult or Bidert shatan suult (Mongolian)

Subspecies in Mongolia: *L. l. lanceolata* (see del Hoyo *et al.* (2006) for further details)

Synonyms: *Sylvia lanceolata* (Temminck, 1840)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed and grass cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: United States; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Denmark; Svalbard and Jan Mayen; Sweden; Serbia; Finland; Russian Federation; Kazakhstan; India; China; Sri Lanka; Nepal; Mongolia; Bangladesh; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan; Palau.

Regional Distribution: This species breeds in valleys of Tes River (Northern Uvs Depression) and possibly in Khar-Us, and Khar Lakes, Herlen, Onon, Balj and Ulz Rivers (Fomin&Bold, 1991; Dawaa *et al.*, 1994). It migrates through the breeding areas, lake and river valleys with tall cover, reeds and dense bushes, mountain valleys with tall cover and rocks and open dry steppe in Herlen-Ulz River basins, Middle Khalkh Steppe, Eastern Mongolian Plain, and Khalkh, Degee, Nömrög Rivers and Buir, and Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008). Single bird was photographed in bushy area near cliffs at Darkhan Mountain, Darkhan sum of Hentii province on 6 May, 2006 and in poplar trees at Ongi monastery of Övörkhangai province on 7 June, 2007 (S.Gombobaatar pers. comm. and photographs).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating birds arrive in Mongolia by late April to mid-May. Late migrants were seen in the steppe by mid-June. Breeding pairs prefer to select lush herbage of moist areas at the edge of water or marshes, wet grassland with scattered shrubs, or moist grassy clearings in forest and scrub. Female builds own nest in tall grass and herbage, often against a mound or tussock, and usually not visible from above. The nest is a deep, well-shaped cup of a base of small leaves, with a thick outer cup of grass stems and leaves, with moss and dry leaves, with fine grasses in a smooth cup. The female usually lays 5 eggs of glossy white or very pale pink colour with pink, reddish-brown, purplish-brown very fine speckles overall, a little denser at or about the larger end. Duration of incubation and fledging is poorly studied in Mongolia. It feeds on terrestrial arthropods and their larvae. On migration, the species occurs usually singly in various habitats including reeds, tall sedges, tall and dense bushes, young deciduous, scattered scrub and planted trees and gardens in towns and cities from forest to Gobi Desert in Mongolia. Most breeding and migrating individuals are found by late August-early September. Duration of autumn migration depends in weather and food resources in the country.

Habitat Type: 1. Forest (1.1., 1.4. with bushes and young deciduous on migration); 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration); 12. Artificial – Aquatic (12.6., 12.9. with forest and bushes only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /steppe fires may burn breeding habitats /; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused

by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

312. Scientific Name: *Locustella naevia*

Species Authority: (Boddaert, 1783)

Common Names: Common Grasshopper-warbler, Eastern Grasshopper Warbler or Pale Grasshopper Warbler (English), Egel shatansuult or Shatan suult (Mongolian)

Subspecies in Mongolia: *L. n. straminea*, *L. n. mongolica* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2006) for further details)

Synonyms: *Motacilla naevia* (Boddaert, 1783)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed and grass cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Cape Verde; Senegal; Western Sahara; Mauritania; Gambia; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Ghana; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Serbia; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Ethiopia; Kenya; Israel; Saudi Arabia; Lebanon; Iraq; Georgia; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Uzbekistan; Afghanistan; Tajikistan; China; Nepal; Mongolia.

Regional Distribution: This species breeds in the valley of Achit Lake (Gobi-Altai Mountain Range). It has been recorded at Buyant River near Khovd town, possibly in the lakes of the Great Lakes Depression and Valley of the Lakes and areas with tall grass and bushes of mountains and lake valleys and springs in the Gobi (Dzungar, Trans-Altai and Alashani Gobi) on migration (Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003).

Population: The global population consists of 3,000,000 - 15,000,000 mature individuals. Global breeding and resident ranges are estimated at 9,560,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding begins in late May-early June. Breeding and migration ecology of the species are poorly known in Mongolia. Breeding habitats are rank vegetation, clumps of bushes, thickets and rarely in reed beds in both dry and moist areas. Breeding pairs build own nest on the ground or in a tussock. The nest is a bulky cup of dried plant stems, grasses and fiber, lined with softer plant matter. Female lays 4-7 eggs of glossy white colour with reddish-brown, or brownish -grey fine spots and speckles. The female incubates the eggs alone. The female cares for and feeds young on various terrestrial arthropods and their larvae. They forage in tall plants or on the ground. On migration, it occurs singly in tall vegetated areas in the lake and river valleys. They leave Mongolia by late August-early September.

Habitat Type: 1. Forest (1.4. with dense bushes and reeds on migration); 3. Shrub-land (3.4. on migration); Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.7. Fires /steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic-6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial /domestic and commercial water pollution is a potential threat to breeding success of the species, associated with habitat change/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby on migration and Eurasian Badger (*Meles meles*) in breeding sites prey on the species/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 15.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

313. Scientific Name: *Locustella certhiola*

Species Authority: (Pallas, 1811)

Common Names: Pallas's Grasshopper-warbler (English), Guimhii shatansuult or Guimhii shatan suult (Mongolian)

Subspecies in Mongolia: *L. c. certhiola*, *L. c. centralasiae*, *L. c. spasimstriata* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2006) for further details)

Synonyms: *Motacilla certhiola* (Pallas, 1811)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed and grass cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Ireland; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Poland; Latvia; Egypt; Russian Federation; Israel; Kazakhstan; Afghanistan; India; China; Sri Lanka; Nepal; Mongolia; Bangladesh; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Hong Kong; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: It breeds in valleys of Uvs Lake and the delta of Tes Nariin, and Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar, and Dörgön Lakes (Great Lakes Depression); Zavkhan River (Zavkhan Desert Steppe Depression); upper Orkhon Rivers, and Sangiin Dalai and Ögii Lakes (Khangai Mountain Range); Hövsgöl, Eg River, Shishgid, Dood Lake wetlands (Darkhad Depression) (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and upper Herlen Rivers (Hentii Mountain Range); Herlen-Ulz River basins; rivers and lakes in Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit, and Azarga Rivers and Buir, Tashgain Tavan, and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, lake and river valleys with tall bushes, trees and reeds, and mountain valleys with dense vegetation near water in the Eastern Mongolian Plain; Baruunkhurai Depression and oases in Trans-Altai, Northern and SW Eastern Gobi (Kozlova, 1930; Bold, 1970; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding season begins late May to early June, depending on food availability and weather conditions. Breeding pairs nest on the ground in grassy meadows, marshes and swamps with bushes and rank growth in both dry and damp areas at the edge of mountain taiga forest, forest steppe, river valleys and rarely in reedy areas in lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The female builds the nest, a loosely built cup of dead stems and leaves of surrounding plant materials, lined with finer leaves and fibres. The female usually lays 4-7 eggs of glossy white colour with brown, greyish-brown, or purplish brown fine speckles at the larger end. The female incubates the eggs alone for 11-12? days. The female cares for and feeds young on various arthropods including flies, beetles, bugs, ants, and spiders in the nest. They forage in reeds, tall plants, or on the ground. On migration they occur singly in various habitats including tall plants, reeds, bushes, and young deciduous trees from forest to Gobi Desert. This is one of the common migrants by late August-early September in Mongolia. The species occurs in open arid steppe habitats on migration. On autumn migration single birds are found in planted trees and tall vegetated areas in garden and trees in towns and cities, or at edges of mountain rivers and creeks of the steppe and Gobi Desert.

Habitat Type: 1. Forest (1.4. with dense bushes and reeds on migration); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration); 12. Artificial – Aquatic (12.6., 12.9. with forest and bushes only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood

-1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide against insects are causes of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Hobby on migration, and Eurasian Badger (*Meles meles*) and Red Fox (*Vulpes vulpes*) in breeding sites prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

314. Scientific Name: *Locustella ochotensis*

Species Authority: (Middendorff, 1853)

Common Names: Middendorff's Warbler or Middendorff's Grasshopper Warbler (English), Middendorfyn shatansuult or Middendorfyn shatan suult (Mongolian)

Synonyms: *Sylvia (Locustella) ochotensis* (Middendorff, 1853)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It has a very restricted area of occupancy of less than 20,000 km² and the regional population is unknown; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: United States; Russian Federation; China; Mongolia; Indonesia; Malaysia; Brunei Darussalam; Hong Kong; Taiwan; Philippines; Republic of Korea; Japan.

Regional Distribution: It breeds in the valleys of Khalkh, Degee, Nömrög, Tsagaan chuluut, Mogoit and Azarga Rivers, and Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. However, there are few references for the breeding of the species in Mongolia and the documentation is doubtful. Breeding and migration behavior is still unknown in Mongolia. According del Hoyo *et al.* (2006), this species nests and migrates through thick grasses and bushes in plains, hills and marshy valleys. Female builds a loose cup of grasses and leaves on the ground, or in grasses close to ground well hidden in dense plants. The female usually lays 4-6? eggs of glossy white colour with brown, or brownish grey speckles and blotches. The female incubates the eggs alone. The female cares for and feeds young on various terrestrial and aquatic insects and their larvae. They forage in reeds, tall plants, or on the ground. On migration, they occur singly in tall vegetated areas in the lake and river valleys. They leave Mongolia by late August-early September.

Habitat Type: 1. Forest (1.4. with dense bushes and reeds on migration); 3. Shrub-land (3.4. on migration); Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial /domestic and commercial water pollution is a potential threat to breeding success of the species, associated with habitat change/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby on migration, Eurasian Badger (*Meles meles*) and Red Fox (*Vulpes vulpes*) in breeding sites prey on the species/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance-10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 23.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

315. Scientific Name: *Locustella luscinioides*

Species Authority: (Savi, 1824)

Common Names: Savi's Warbler or River Warbler (English), Shagshuurgyn shatansuult or shagshuurgyn shatan suult (Mongolian)

Subspecies in Mongolia: *L. l. fusca* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2006) for further details)

Synonyms: *Sylvia luscinioides* (Savi, 1824)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It has a very small area of occupancy, less than 5,000 km², and the regional population is unknown; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further

research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Senegal; Mauritania; Morocco; Mali; Ireland; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Ghana; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Armenia; Islamic Republic of Iran; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Tajikistan; China; Mongolia.

Regional Distribution: It breeds in valleys of Khar and Khar-Us Lakes (Great Lakes Depression) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2008; Gantugs, 2008).

Population: The global population consists of 2,000,000 - 5,000,000 mature individuals. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding begins in late May-early June. Breeding habitats are thickets and dense growth in damp, swampy areas and reed beds. Migration and breeding ecology is not well known in the country. According to del Hoyo *et al.* (2006), the female builds the nest into the bases of reeds, sedges or tall grasses in swampy places, on the ground or raised above ground or over water. The nest is a cup loosely built of dead leaves of waterside plants with an inner section often woven more firmly from grass stems. Its inner cup is often firm and smooth, lined with finer leaves and fibres. The female usually lays 4-5, sometimes 3-6 eggs, glossy white finely and profusely speckled overall with brown, greyish-brown, or purplish brown at the larger end. The eggs are incubated by the female alone for 12 days. The female cares for and feeds young on various arthropods including flies, beetles, bugs, spiders, snails and others in the nest for 12-14 days. On migration, it occurs singly in tall sedges, reeds, and bushy areas in lake and river valleys in the west. Autumn migration begins by late August-early September depending on food availability and weather conditions in Mongolia.

Habitat Type: 3. Shrub-land (3.4. only on migration); 4. Grassland (4.4. possibly only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, and drought in both non-breeding and breeding

seasons/, 9. Intrinsic factors- 9.5. Low densities -9.9. Restricted range /these factors always negatively affect the number of this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 67.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

316. Scientific Name: *Locustella fasciolata*

Species Authority: (Gray, 1860)

Common Names: Gray's Grasshopper-warbler (English), Taigyn shatansuult or taigyn shatan suult (Mongolian)

Subspecies in Mongolia: *L. f. fasciolata* (see del Hoyo *et al.* (2006) for further details)

Synonyms: *Acrocephalus fasciolatus* (Gray, 1860)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. A few records exist from eastern Mongolia during migration and breeding in Northern Mongolia. The regional population is unknown; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: France; Denmark; Russian Federation; China; Mongolia; Indonesia; Australia; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan; Papua New Guinea.

Regional Distribution: This species may breed in the basins of Eg River and Darkhad Depression (Hövsgöl Mountain Range) and Khalkh River (Buir Lake-Khalkh River-Khyangan region) (Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2005a; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating birds are found by late April-early May in northern and eastern Mongolia. Breeding begins in late May-early June. In the breeding period, birds are found in grassy thickets in meadows and mountains slopes, and thin forests with undergrowth in mountain taiga forest, forest steppe and river valleys and rarely in reed beds. Breeding and migration ecology of the species is poorly known in Mongolia. According to del Hoyo *et al.* (2006), this species feeds on terrestrial invertebrates including flies, ants, spiders and larvae. On migration, it occurs singly in dense bushy and tall vegetated areas near forest and river valleys. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1., 5.3. with forest, bushes and scrub on migration and feeding, 5.4., 5.7 in breed-

ing, 5.16. only on migration); 6. Rocky areas (only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Sparrow Hawk, Eurasian Badger (*Meles meles*) and Grey Wolf (*Canis lupus*) prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 14.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

317. Scientific Name: *Acrocephalus bistrigiceps*

Species Authority: Swinhoe, 1860

Common Names: Black-browed Reed-warbler or Schrenk's Reed Warbler (English), Kharhömsögt okhilbyalzuukhai or Dornodyn okhil byalzuukhai (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; India; China; Mongolia; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Hong Kong; Taiwan;

Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in the valleys of Ulz River (near Döch River), lower Herlen, Khalkh, and Azarga Rivers, and Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating birds arrive in Mongolia by late April–mid-May. Breeding begins by late May–early June. It breeds in waterside plants and shrubs, by lakes, rivers, ditches, and marshy places. Female builds own nest among reeds, sedges or rarely shrubs growing in water. The nest is a well-constructed cup of grass stems, and strips of leaves and reed fibers, and some reed-flower heads and occasionally plant down. The female lays 4–6 glossy pale green eggs with olive, dark green, and some grayish brown speckles and blotches. The eggs are incubated by the female alone for 13–14 days. Nesting period is 14–15 days (Harris, 1975). They feed on aquatic and terrestrial arthropods such as flies, beetles, bugs, caterpillars, spiders, snails, mayflies, dragonflies, and their larvae in reeds and plants. In breeding season, individuals occur singly or in pairs in dense reed beds and mixed vegetation of reeds and tall sedges, or reeds and bushes in lake and river valleys. Migrating birds occur in reeds and tall vegetated areas along river valleys and lake hollows in the east. It is a fairly common breeder in Tashgain Tavan Lake, Khalkh River delta, Guu and Azarga Rivers in eastern Mongolia.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial /domestic and commercial water pollution is a potential threat to breeding success of the species, associated with habitat change/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby, Eurasian Sparrow Hawk on migration and Eurasian Badger (*Meles meles*) in breeding sites prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/ 9. Intrinsic factors-9.9. Restricted range /these factors always negatively affect the number of this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

318. Scientific Name: *Acrocephalus agricola*

Species Authority: (Jerdon, 1845)

Common Names: Paddyfield Warbler (English), Heeriin okhilbyalzuukhai or heeriin okhil byalzuukhai (Mongolian)

Subspecies in Mongolia: *A. a. agricola*, *A. a. capistratus* (see Howard & Moore (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Sylvia (Acrocephalus) agricola* (Jerdon, 1845)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Ireland; Portugal; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Sweden; Slovenia; Poland; Malta; Hungary; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Ukraine; Bulgaria; Estonia; Turkey; Russian Federation; Israel; Armenia; Islamic Republic of Iran; Kazakhstan; Bahrain; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Bangladesh; Myanmar; Thailand; Lao People's Democratic Republic; Hong Kong.

Regional Distribution: It breeds in Achit Lake (Mongol-Altai Mountain Range), Uvs Lake and the delta of Tes Nariin, and Torkholig Rivers (Northern Uvs Depression), Khar-Us and Khar Lakes (Great Lakes Depression), Zavkhan and Bogd rivers, and Bayannuur of Bayannuur sum of Bulgan province. It may nest in Bulgan River valley (Khovd province), Ögii Lake (upper Orkhon River, Khangai Mountain Range), and Orog Lake (Valley of the Lakes). It migrates through the breeding areas (Kozlova, 1930; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008). Y.Shigeta, a researcher from Yamashina Institute for Ornithology, Japan and S.Gombobaatar observed and caught more than 10 breeding pairs in reed beds of Bayannuur of Bayannuur sum at Bulgan province in July, 2010 (S.Gombobaatar pers. comm., photographs and ringing data).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 9,180,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in Mongolia by late April-mid-May. Breeding begins in late May-early June. This species prefers to select reeds in reed beds and dense vegetated marshy areas, in river banks and lake valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female builds own nest among reeds, sedges or rarely in shrubs growing in water. The nest is a well-constructed cylindrical cup bound to vertical stems. The nest is made of tightly woven grass stems, and strips of leaves and reed fibers, some reed-flower heads and occasionally plant down. The female usually lays 4-5, rarely 6 eggs of glossy pale green colour with olive, dark green, and some grey indistinct fine speckles and spots. The eggs are incubated by the female alone for 12 days. Both adults care for young and feed them on mayflies

(Ephemeroptera), dragonflies (Odonata), bugs (Hemiptera), ants (Hymenoptera), beetles (Coleoptera), spiders (Araneae), earthworms, and other flies. After the breeding season, they remain close to each other in breeding sites. On migration, individuals occur in reed beds, tall sedges areas and dense bushy sites in lake and river valleys. Migrating individuals leave Mongolia by late August–early September.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial /domestic and commercial water pollution is a potential threat to breeding success of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon on migration and Eurasian Badger (*Meles meles*) in breeding sites prey on the species/, 8.3. Prey or food base /decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

319. Scientific Name: *Acrocephalus dumetorum*

Species Authority: Blyth, 1849

Common Names: Blyth's Reed-warbler (English), Butny okhilbyalzuukhai or Butny okhil byalzuukhai (Mongolian)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown. The breeding records have not been well documented, however it is uncommon in Mongolia. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Ireland; Spain; United Kingdom; Gibraltar; France; Belgium; Nigeria; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Sweden; Malta; Romania; Finland; Latvia; Lithuania; Estonia; Belarus; Russian Federation; Cyprus; Israel; Jordan; Syrian Arab Republic; Islamic Republic of Iran; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; Sri Lanka; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Hong Kong.

Regional Distribution: Breeding birds are found in Uvs (Northern Uvs Depression), Khar-Uls and Khar Lakes (Great Lakes Depression) and Bulgan River (Baruunkhurai Depression or Dzungariin Gobi). It migrates through the breeding areas, but there are no records of its occurrence outside the nesting areas (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a;).

Population: The global population consists of 10,000,000 - 50,000,000 mature individuals. Global breeding and resident ranges unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in Mongolia by early May-mid-May. Breeding begins possibly by early June-mid-June. Breeding ecology of the species has not been well studied in Mongolia. Breeding pairs nest in tall dense grasses, thickets and reeds in forests and the lake and river valleys (Gombobaatar, 2012). According to del Hoyo *et al.* (2006), female builds own nest in reeds, bushes and scrub in scrubby areas often near water, but not in marshes. Female lays 4-6 eggs of glossy grey green colour with dark brown, reddish-brown, brownish-grey spots and blotches. The female incubates the eggs alone. Duration of incubation and fledging is unknown in Mongolia. Both parents care for and feed young on terrestrial arthropods including flies, beetles, spiders, bugs and other invertebrates. On migration, individuals occur in reeds, dense bushy areas and tall sedges in lake valleys in the west.

Habitat Type: 3. Shrub-land (3.4. on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/, 6.3. Pollution-6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon migration, and Eurasian Badger (*Meles meles*) in breeding sites prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

320. Scientific Name: *Acrocephalus arundinaceus*

Species Authority: (Temminck & Schlegel, 1847)

Common Names: Great Reed-warbler (English), Ih okhilbyalzuukhai or Ih okhil byalzuukhai (Mongolian)

Subspecies in Mongolia: *A. a. zarudnyi* (see Howard & Moore (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Turdus arundinaceus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Senegal; Western Sahara; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Burkina Faso; France; Ghana; Togo; Niger; Benin; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Gabon; Liechtenstein; Libyan Arab Jamahiriya; Equatorial; Austria; Congo; Sweden; Angola; Namibia; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; South Africa; Hungary; Slovakia; Montenegro; Serbia; Albania; Botswana; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Zambia; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Zimbabwe; Turkey; Moldova; Russian Federation; Rwanda; Burundi; United Republic of Tanzania; Uganda; Mozambique; Swaziland; Malawi; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bangladesh; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Australia; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan; Papua New Guinea.

Regional Distribution: Breeding birds are found around Aчит Lake (Mongol-Altai Mountain Range); Uvs, Khar-Us, Khar, and Döргөн Lakes and the delta of Khovd River (Great Lakes Depression). Possibly breeds and migrates through reed beds and marshy areas of Bulgan River (Baruunkhurai Depression) Urd Tamir (Tsetserleg town), upper Orkhon River (Khangai Mountain Range) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008

Population: The global population consists of 10,000,000 - 35,000,000 mature individuals. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating birds are found in Mongolia by late May-mid-May. This species builds its nest on reeds in overgrown reeds and thickets or bushes near lakes, marshes, ponds, pools and rivers (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010;

Gombobaatar, 2012). Eastern limit of breeding ranges of the species in Mongolia is still uncertain. Due to mis-identification of the species in the field and taxonomical changes, breeding records are doubtful. According to del Hoyo *et al.* (2006), breeding pairs nest in reeds, built around reed stems 0.7-2 m above water. The nest is a tightly-woven, deep cylindrical cup built of plant stems and leaves, reed-flowers and plant down, lined with small leaves, roots, reed-flowers, down, hair and sometimes feathers. The female usually lays 4-6 eggs, rarely 3 eggs of slightly glossy pale green, bluish-green, or blue colour with blackish-brown, olive-brown, light olive or green, and pale blue-grey spots and blotches and markings. The eggs are incubated by the female alone for 13-15 days. Both adults care for young and feed them on spiders, some snails, mayflies, dragonflies, bugs, flies, ants, bees, wasps, and their larvae for 11-15 days. On migration, individuals or small groups of 3-6 individuals occur in reeds, tall and dense sedges, and bushes and young deciduous trees such as poplars, willows and birches in lake and river valleys.

Habitat Type: 3. Shrub-land (3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial /domestic and commercial water pollution is a potential threat to breeding success of the species, associated with habitat change/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators, Eurasian Badger (*Meles meles*) in breeding sites prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

321. Scientific Name: *Acrocephalus orientalis*

Species Authority: (Temminck & Schlegel, 1847)

Common Names: Oriental Reed-warbler (English), Dornyn okhilbyalzuukhai (Mongolian)

Synonyms: *Salicaria turdina orientalis*

Global Status: Not Evaluated

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Siberia; Guinea; Israel; Kuwait; India; China; Mongolia; Indonesia; Australia; Philippines; Japan; Korea; Papua New Guinea.

Regional Distribution: It breeds in Borogchin Lake (Bayannuur sum), lower Orkhon, Selenge, Eg, and Kharaa Rivers (Orkhon-Selenge River basins); Tuul, Onon, Balj Rivers (Hentii Mountain Range); Herlen-Ulz River basins; lake and river valleys in Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög, and Azarga Rivers, and Buir and Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region). Western limit of its distribution is uncertain.

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in Mongolia by early to mid-May. Breeding begins in late May-early June. In breeding season, this species occurs in overgrown reeds and thickets or bushes near lakes, marshes, ponds, pools and rivers (Gombobaatar, 2012). Due to misidentification in the field, breeding records in the west are still uncertain. Western limit of its breeding in Mongolia is still uncertain. They have small breeding territories and can achieve high population densities. The nest is built 1-1.5 m above the ground among reed stems. The nest is a deep cylindrical cup of plant stems and leaves, lined with small leaves, roots, reed-flowers, hair and feathers. Female lays 2-6 eggs of slightly glossy pale green, or bluish-green colour with darkish-brown, olive-brown, light olive, and pale bluish-grey spots and blotches. The eggs are incubated by the female alone for 12 - 14 days. The young birds fledge after 10 to 15 days. Both adults feed them on spiders, mayflies, dragonflies, bugs, flies, ants, bees, wasps, and their larvae. On migration, individuals or small groups of 4-8 individuals occur in dense reeds, tall and dense sedges, and bushes and young deciduous trees such as poplars, willows and birches in lake and river valleys. On migration, these skulking individuals are difficult to observe in the field due to their elusive behavior.

Habitat Type: 3. Shrub-land (3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges, 5.13. with reeds and tall sedges).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial /domestic and commercial water pollution is a potential threat to breeding success of the species, associated with habitat change/; 7. Natural disasters- 7.1. Drought / due to the drought of the last few years, degradation and loss of habitats have been intensively occurring

in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators like Eurasian Badger (*Meles meles*) in breeding sites prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

322. Scientific Name: *Acrocephalus stentoreus*

Species Authority: (Hemprich & Ehrenberg, 1833)

Common Names: Clamorous Reed-warbler, Egyptian Great Reed Warbler or Southern Great Reed Warbler (English), Ömnödiin okhilbyalzuukhai or Ömnödiin okhil byalzuukhai (Mongolian)

Subspecies in Mongolia: *A. s. brunnescens* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Curruca stentorea* (Hemprich & Ehrenberg, 1833)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: India; Sudan; Egypt; Israel; Saudi Arabia; Eritrea; Iraq; Somalia; Yemen; Islamic Republic of Iran; Kazakhstan; Kuwait; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; China; Sri Lanka; Nepal; Mongolia; Bangladesh; Myanmar; Indonesia; Thailand; Lao People's Democratic Republic; Viet Nam; Philippines.

Regional Distribution: A single bird was found at Biger Lake of Trans-Altai in June and Lun sum of Töv province in June (Fomin & Bold, 1991; Dawaa *et al.*, 1994).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a vagrant. Migrating individuals may pass through southern and Central Mongolia by early May-mid-May. It occurs in dense reed beds and densely vegetated areas around lakes and along rivers. According to del Hoyo *et al.* (2006), diet of the species consists of mayflies, grasshoppers, flies, bugs, ants, beetles, snails, and young frogs in breeding season. On autumn and migration, it feeds on invertebrates and also seeds of aquatic plants.

Habitat Type: 3. Shrub-land (3.4. on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.7. Fires; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It migrates through some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

323. Scientific Name: *Acrocephalus aedon*

Species Authority: (Pallas, 1776)

Common Names: Thick-billed Warbler, Thick-billed Reed Warbler or Thick-billed Reed-warbler (English), Bankhar okhilbyalzuukhai or bankhar khardai (Mongolian)

Subspecies in Mongolia: *A. a. rufescens*, *A. a. stegmanni* (see Howard & Moore (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Phragmaticola aedon* (Pallas, 1776), *Muscicapa aedon* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Egypt; Russian Federation; India; China; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Hong Kong; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: It breeds at Tarvagatai River (Khangai Mountain Range); Hövsgöl Lake and Eg, Uur Rivers; Shishgid, Dood Lake wetlands (Darkhad Depression) (Hövsgöl Mountain Range); Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Bogd Khaan Mountain and upper Tuul, Onon, and Balj Rivers (Hentii Mountain Range); Nömrög and Azarga Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, open dry habitats, steppe mountains with bushes and rocks, mountain valleys with tall bushes, lake and river valleys with reed beds, dense bushes and young trees in Valley of the Lakes, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, and Northern Gobi (Gurvansaikhan Mountain range), Saxaul forest in the Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive

in Mongolia late April-mid-May. Late migrants occur in the steppe by early June. Breeding begins in late May to early June. Breeding pairs nest in overgrown bushes at forest edges, young birches beside bogs and river valleys, young dense willows, rarely in reed beds in lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is built in a bush by the female, and is a cup of dry grasses, stems and leaves, lined with finer grasses and rootlets. The female lays 4-6 eggs of slightly glossy greenish blue, or bluish-green colour with reddish-brown, olive-brown, and pale bluish-grey spots and blotches. The eggs are incubated by the female alone for 13-14 days. Both adults feed young on grasshoppers, caterpillars, moths, spiders, flies, beetles, bugs, and their larvae. Young begin to fly at 18 days. On migration, they feed on seeds and fruits in trees. They forage in low bushes and young deciduous trees and rarely on the ground on migration. On migration, individuals occur in dense bushes, young dense deciduous trees, high vegetated areas, reeds, tall sedges and planted trees and gardens in towns and cities from forest to Gobi Desert. Most breeding and migrating birds leave Mongolia late August-mid-September. They occur regularly in poplar trees in towns and cities in open desert steppe and Gobi Desert.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds on migration, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants on migration, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges on migration, 5.13. with reeds and tall sedges on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration); 12. Artificial – Aquatic (12.6., 12.9. with forest and bushes only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood-1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide against insects are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic-6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/, 6.3. Water pollution-6.3.2. Domestic-6.3.3. Commercial or Industrial /domestic and commercial water pollution is a potential threat to breeding success of the species, associated with habitat change/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 6.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

324. Scientific Name: *Hippolais caligata*

Species Authority: (Lichtenstein, 1823)

Common Names: Booted Warbler (English), Khaliu zaarag (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Cape Verde; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Denmark; Austria; Sweden; Finland; Estonia; Egypt; Turkey; Russian Federation; Israel; Jordan; Lebanon; Islamic Republic of Iran; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Sri Lanka; Nepal; Mongolia; Bangladesh; Hong Kong.

Regional Distribution: Breeding birds are found in Achit and Uureg Lake valleys (Mongol-Altai Mountain Range); NE Kharkhiraa Mountain; Uvs Lake and the delta of Tes, Nariin, Torkholig (Northern Uvs Depression), Tes (Great Lakes Depression) and Bulgan River valleys (Baruunkhurai Depression). It migrates across the breeding ground, lake and river valleys Gobi-Altai mountain range and oases in Trans-Altai Gobi, Alashani, and SW Eastern Gobi (Fomin & Bold, 1991; Dawaa *et al.*, 1994).

Population: The global population is estimated at 500,000 - 5,000,000 mature individuals. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating birds arrive in Mongolia by early to late May. Breeding begins in late May to mid-June. Breeding pairs prefer to nest in thickets at forest edges, in burnt-over forest areas, birch groves, wild rose bushes, sometimes in reeds, lower dense trees in open terrain in forest and forest steppe. The nest is placed usually on the ground among stems of tall weeds or grasses. The nest is a strongly- built cup of plant stems, dead leaves, rootlets and some fur or feathers, lined with plant down, grass and fibres, and with a deep inner cup of plant down and sometimes feathers and hair. The female usually lays 5-6 eggs of glossy pale dull colour with pinkish, spotted and speckled with sparse black or blackish-brown markings. The female incubates the eggs for 12-14 days. Both sexes feed young mainly on insects and other invertebrates including grasshoppers, bugs, small crickets, moths, butterflies, flies, ants, wasps, beetles, spiders, mites and some larvae for 12-14 days. The young can fledge at 12-14 days. They forage low in bushes, near ground, or on the ground. On migration, individuals occur in dense bushy areas and young deciduous trees, scattered tall bushes and trees in lake and river valleys, forest steppe, forest edges and mountain valleys.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds on migration, 5.3. on migration, 5.4. with reeds, sedges and other wetlands plants on migration, 5.5. with tall reeds and sedges on migration, 5.7. with dense and tall reeds and sedges on migration; 6. Rocky areas (with bushes and trees only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

325. Scientific Name: *Phylloscopus trochilus*

Species Authority: (Linnaeus, 1758)

Common Names: Willow Warbler (English), Nogoон дуучшувуу or Дууч тсоровдой (Mongolian)

Subspecies in Mongolia: *P. t. yakutensis* Ticehurst, 1935; *P. t. acredula* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Motacilla trochilus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Cape Verde; Senegal; Western Sahara; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; Saint Helena;

United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Togo; Niger; Benin; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Monaco; Cameroon; Gabon; Liechtenstein; Libyan Arab Jamahiriya; Equatorial; Austria; Svalbard and Jan Mayen; Congo; Sweden; Angola; Namibia; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; South Africa; Hungary; Slovakia; Montenegro; Serbia; Albania; Botswana; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Zambia; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Zimbabwe; Turkey; Moldova; Lesotho; Russian Federation; Rwanda; Burundi; Tanzania; Uganda; Mozambique; Swaziland; Cyprus; Malawi; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Comoros; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Seychelles; India; Mongolia; Japan.

Regional Distribution: This species breeds in W Hövsgöl Mountain and Darkhad Depression. It may nest at Tes River valley (Northern Uvs Depression) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2005a; Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2005).

Population: The global population consists of 300,000,000 - 1,200,000,000 mature individuals. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in Mongolia by late April- early May. Breeding begins in early June-mid-June. This species nests on the ground underneath dense grass in a variety of forest types including willows, deciduous forest with thickets and bushes in high mountains, mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding habitats are tall herbage or low foliage cover at the edges of trees or shrubs. The nest, built by the female, has a domed structure of grass, plant stems, moss and roots, making a spherical nest with side entrance, with an inner cup of finer stems, roots and feathers. The female usually lays 6-7 eggs of a smooth glossy white with light red or reddish-brown or reddish-buff fine speckles overall. The eggs are laid at daily intervals. The female incubates the eggs alone for 13 days. The young are tended by both parents and spend 13-16 days in the nest (Harrison, 1975). Both adults feeds young on mayflies (Ephemeroptera), small dragonflies (Odonata), bugs (Hemiptera), moth (Lepidoptera), bees and other dipteran flies (Hymenoptera), beetles (Coleoptera), spiders (Araneae), ants (Formicidae), snails (Gastropoda), and mosquitoes (Culicidae). After the breeding season, and on migration, they eat plant matter. They forage in trees and branches of trees, or on the ground. On migration, individuals occur singly or in small groups of 3-6 individuals in forested areas and bushy areas in forest steppe, river and lake valleys. Migrating individuals are also found in gardens and planted deciduous trees in towns and cities. Breeding and migrating individuals leave Mongolia by late August-early September, depending on weather conditions and food availability.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Live-stock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Hobby and Eurasian Sparrow Hawk prey on the species on migration/.

8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

326. Scientific Name: *Phylloscopus collybita*

Species Authority: (Vieillot, 1817)

Common Names: Common Chiffchaff, Chiffchaff, Eurasian Chiffchaff or Siberian Chiffchaff (English), Uriankhain duuchshuvuu or Uriankhain duuch shuvuu (Mongolian)

Subspecies in Mongolia: *P. c. tristis* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Sylvia collybita* (Vieillot, 1817), *Phylloscopus collybitus* (Vieillot, 1817)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Senegal; Western Sahara; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Mali; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Niger; Benin; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Rwanda; Tanzania; Uganda; Cyprus; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Seychelles ; Uzbekistan; Afghanistan; Tajikistan; India; China; Nepal; Mongolia; Bangladesh; Bhutan; Hong Kong; Japan.

Regional Distribution: It breeds at Khovd and Yolt Rivers (Mongol-Altai Mountain Range); Tes River (Northern Uvs Depression); Tamir and upper Orkhon Rivers; Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake area, Eg River, and Darkhad Depression (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai and Herlen Rivers (Hentii Mountain Range). It migrates through the breeding areas, open dry habitats with bushes and trees in the Gobi-Altai Mountain Range (except for high altitudes), Great Lakes Depression, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes; and oases and reed beds in the Gobi (Dzungar, Trans-Altai, Northern, Alashani and Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Terbish & Gombobaatar,

2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 200,000,000 - 700,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating birds arrive in Mongolia by late April-early May. Breeding begins in late May-early June. Breeding pairs nest in dense overgrown thickets and bushes in deciduous and mixed forests in mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest has a domed structure on the ground or a little above it in tall herbage, or low thick bushes. The nest is made of plant stems, moss, dead leaves, and plant debris, often on a base of dead leaves. Slightly more loosely made than that of Willow Warbler and thickly lined with feathers. Female lays 4-9 eggs of glossy white colour with reddish-brown sparse fine speckles and markings, often mainly at the larger end. The eggs are incubated by the female alone for 13-14 days. Young are fed mainly by the female, with some help from the male. The young spend 12-15 days in the nest. Both parents feed young on terrestrial arthropods such as stoneflies (Plecoptera), grasshoppers (Orthoptera), bugs (Hemiptera), small butterflies and moths (Lepidoptera), dipteran flies (Culicidae), small bees (Hymenoptera), beetles (Coleoptera), spiders (Araneae), mites (Acari) and larvae of some of these invertebrates. Late autumn and on migration, they eat plant matter including soft seeds and berries. On migration, individuals occur singly or in very loose groups of 3-5 individuals in areas with deciduous, and young coniferous trees, tall bushes, other plants, and scattered trees from forest steppe to desert steppe. Their autumn migration occurs by late August-early September in Mongolia. Migrating individuals are also found in planted trees and gardens, rocky mountains and river valleys with shrubs and bushes.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial - Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. Bycatch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

327. Scientific Name: *Phylloscopus sibilatrix*

Species Authority: (Bechstein, 1793)

Common Names: Wood Warbler (English), Tarchignaa duuchshuvuu or Tarchignaa duuch shuvuu (Mongolian)

Synonyms: *Motacilla sibilatrix* (Bechstein, 1793)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: United States; Iceland; Senegal; Mauritania; Gambia; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Togo; Niger; Benin; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Gabon; Liechtenstein; Libyan Arab Jamahiriya; Equatorial; Austria; Congo; Sweden; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Rwanda; Tanzania; Uganda; Cyprus; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Georgia; Somalia; Yemen; Comoros; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Seychelles; China; Mongolia; Japan.

Regional Distribution: An adult bird was caught by Hungarian ringers in deciduous forest in Delgermörön River valley (Hövsgöl Mountain Range) in June 1994. A second bird was documented on a poplar tree in Choibalsan town on 11-12 September 2004 (Badley *et al.*, 2005; Tseveenmyadag & Bold, 2006).

Population: The global population consists of 45,000,000 - 90,000,000 mature individuals. Global breeding and resident ranges are estimated at 7,540,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a vagrant. There are only two documented records in eastern and north-western Mongolia. Del Hoyo *et al.* (2006) described its suitable habitats as deciduous and mixed forest with undergrowth, dense bushes and fruit trees. It feeds on terrestrial invertebrates such as mayflies, bugs (Hemiptera), larval and adult moths (Lepidoptera), flies (Diptera), and ants (Formicidae) in summer. Late autumn and on migration, it eats berries and other fruits.

Habitat Type: Potential habitats follow: 1. Forest (1.1, 1.4. on migration); 3. Shrub-land (3.3, 3.4. on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees on migration, 5.3., 5.5., 5.13. with trees and bushes on migration).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.7. Fires; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates across some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

328. Scientific Name: *Phylloscopus fuscatus*

Species Authority: (Blyth, 1842)

Common Names: Dusky Warbler or Dusky Leaf Warbler (English), Buht duuchshuvuu or buht duuchshuvuu (Mongolian)

Subspecies in Mongolia: *P. f. fuscatus* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2006) for further details)

Synonyms: *Phyllopneuste (sic) fuscata* (Blyth, 1842)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, forest fire, logging, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Democratic People's Republic of Korea; United States; Mexico; Morocco; Ireland; Portugal; United Kingdom; Gibraltar; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Poland; Finland; Lithuania; Estonia; Egypt; Russian Federation; Cyprus; Israel; Saudi Arabia; Yemen; Kazakhstan; United Arab Emirates; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Cambodia; Hong Kong; Taiwan; Philippines; Japan.

Regional Distribution: This species breeds in Buyant, Khovd, Yolt, and Tes Rivers (Mongol-Altai Mountain Range); Ih Bogd (very isolated breeding record) (Gobi-Altai Mountain Range); Khovd and possibly Chono KharaiKh River (Great Lakes Depression); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range), Hövsgöl Lake valley, Darkhad Depression (Hövsgöl Mountain Range), and Minj, Terelj, Huder, upper Onon, Balj, Herlen, Tuul, and Terelj Rivers (Hentii Mountain Range) (up to 2,700 m asl); Orkhon-Selenge River basins; Degee, Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, open habitats and river valleys with bushes through Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Valley of the Lakes, Baruunkhurai Depression and oases in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Kozlova, 1930; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. It is one of the most common *Phylloscopus* warblers in Mongolia. Breeding and migrating individuals arrive in Mongolia by late April–early May. Breeding begins in late May–early June. Breeding pairs nest on the ground underneath dense willow trees, other thickets and bushes near taiga bogs and wet meadows in high mountain taiga forest, forest steppe and river valleys. It may also build its nest in a tree, or bush at up to 1 m above the ground (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding ecology of the species has not been well documented in Mongolia. The female usually lays 5–6 eggs. Colouration of the eggs is similar to other *Phylloscopus* warblers. The duration of incubation and time of fledging are still unknown in Mongolia. They feed on beetles (Coleoptera including Curculionidae), snails, small moths (Lepidoptera), also seeds and berries. It forages in low branches of trees and bushes, making short sal-

lies to chase flying insects. After the breeding season and on migration, the species occurs usually singly, or in very loose groups of 4-6 individuals in trees and bushes from taiga forest to Gobi Desert. On migration, they migrate through high vegetated areas with rocks and cliffs, and bushes, also river valleys with young deciduous trees and bushes. Migrating birds are also seen in planted trees and gardens in urban areas, often in fences and cattle shelters, ruins of buildings near local herders. Breeding and migrating individuals migrate through the country by late August-mid-September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.1. Competitors /Oriental and Common Cuckoos lay their eggs in this species' nests/ 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

329. Scientific Name: *Phylloscopus griseolus*

Species Authority: Blyth, 1847

Common Names: Sulphur-bellied Warbler, Jerdon's-bellied Willow, Greyish-bellied Willow or Olivaceous Willow Warbler (English), Khasag duuchshuvuu or khasag duuch shuvuu (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat

category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Myanmar.

Regional Distribution: This species breeds in Khovd River to Bulgan River, across the main mountain range of the region, Mönh Khairkhan, Höh Serh massif, surrounding mountains of Achit Lake; and Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); through Mongol-Altai mountains to Ih Bogd (Gobi-Altai Mountain Range); northern Uvs Lake, middle part of Tes River valley (Great Lakes Depression); from Khasagt Khairkhan to Shirengiin River to the W Khangai range and NE Khan Höhii Mountain, Kharkhadny Nuruu (mountain range) and through W Hövsgöl Lake (Darkhad Depression) to the NW region of the lake (Hövsgöl Mountain Range). It migrates through the breeding areas, open habitats and river valleys in Buir Lake-Khalkh River-Khyangan region, Baruunkhurai Depression; and oases and bushy habitats in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Sumiya, 2006). Breeding was recorded (young birds were photographed) in tall dense bushes and thickets in Yolyn Am valley, Ömnögobi province on 13 July, 2010 (S.Gombobaatar pers. comm. and photographs).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding birds arrive in Mongolia by late April-mid-May. Breeding begins by late May-early June. Breeding pairs breed on dry stone mountain slopes, rocky scree and boulder-strewn hillsides with scattered dense bushes like Juniper (*Juniperus* sp.), and other dense shrubs above tree line, or on high mountains at 2,600- 4,000 m asl. The female builds the nest in shrubs and bushes such as juniper, *Salix* spp., and *Caragana* spp. at 0.5-1.5 m high from the ground. The nest is a ball of dry grasses, plant fibres and stems, lined with finer grasses and feathers. The female incubates 1-6 eggs for 14-17 days. Both parents feed young on small beetles (Coleoptera), snails, flies (Diptera), and spiders (Araneae). The young leave the nest at 14-15 days. On migration, individuals or loose groups occur in thick undergrowth in deciduous woodland, rocky areas, steep-sided ravines, and patches of thorny dense tall shrubs along streams and rivers.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 8. Desert (8.2. with rocky hillsides with trees and bushes in high mountains).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss,

use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance-10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

330. Scientific Name: *Phylloscopus armandii*

Species Authority: (Milne-Edwards, 1865)

Common Names: Yellow-streaked Warbler (English), Ulaanhömsögt duuchshuvuu (Mongolian)

Subspecies in Mongolia: *P. a. armandii* (see Howard & Moore (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Abrornis armandii* (Milne-Edwards, 1865)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russia; China; Korea; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Hong Kong.

Regional Distribution: H.-G. Folz found 2 (-5) singing males in Yolyn Am mountain in Gurvansaikhan of Ömnögobi province on 13 June, 2000 (A.Bräunlich pers. comm.). One bird was caught in mixed forest with willows, fruit, poplar, and larch trees in the valley of Khalkh River (11 km SE of Khalkh Gol sum) of Dornod province on 25 August, 2010 (S.Gombobaatar pers. comm.).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a vagrant. There are two records in the east and south of the country. According to del Hoyo *et al.* (2006), it forages in trees and bushes at edges of woodlands. It feeds on small terrestrial invertebrates and their larvae. On migration, the species occurs in areas with trees and scattered tall bushes in Mongolia. The record in high mountains of Gurvansaikhan shows that it is a possible breeding species in the region.

Habitat Type: Potential habitats follow: 1. Forest (1.4. only on migration); 3. Shrub-land (3.3., 3.4. only on migration); 8. Desert (8.2. with rocky hillsides with trees and bushes in high mountains).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.7. Fires; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial; 7. Natural disasters- 7.1. Drought; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance-10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. Migrating birds pass through some protected areas and Important Bird Areas in the south and east.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

331. Scientific Name: *Phylloscopus schwarzi*

Species Authority: (Radde, 1863)

Common Names: Radde's Warbler, Radde's Bush-Warbler or Radde's Leaf Warbler (English), Tsanginaa duuchshuvuu or Tsanginaa duuch shuvuu (Mongolian)

Synonyms: *Sylvia (Phyllopneuste) schwartzi* (Radde, 1863)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Ireland; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Sweden; Poland; Malta; Finland; Russian Federation; Israel; Kazakhstan; Afghanistan; China; Nepal; Mongolia; Bangladesh; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Hong Kong; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: The species migrates through open habitats, forest steppe and river valleys in Hövsgöl, Onon, Balj, Herlen and Ulz River valleys, east to Buir Lake, Khalkh, and Nömrög River basins and Ih Khyangan Mountain range. An individual was also found at Batkhaan Mountain (Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2005a; Sumiya, 2006). Records also exist from Tuul River valley (Hustai Nuruu National Park and Uubulan of Erdene sum in Töv province) (S.Gombobaatar, B.Odkhuu and D.Usukhjargal, pers. comm.).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. In spring and autumn, migrants pass through the eastern part of the country. Del Hoyo *et al.* (2006) mentioned that its diet consists of small terrestrial insects and their larvae. It forages in low branches of trees and bushes, in ground-level vegetation and in dense undergrowth, usually in canopy of trees. In Mongolia, individuals or small groups join with Dusky Warbler and Inornate Warbler in open habitats with bushes, shrubs and scattered trees, forest edges in forest steppe and river valleys on migration. Migrants are also found in planted trees and gardens in urban areas in the east.

Habitat Type: 1. Forest (1.1., 1.4. only on migration); 3. Shrub-land (3.3., 3.4. only on migration); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes only on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn migrating habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticide against is a

cause of individual poisoning/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in migrating season/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near migrating sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

332. Scientific Name: *Phylloscopus proregulus*

Species Authority: (Pallas, 1811)

Common Names: Pallas's Leaf-warbler, Pallas's Warbler, Pale-rumped Warbler, Lemon-rumped Warbler or Yellow-rumped Warbler (English), Jirhen duuchshuvuu or jirhen duuch shuvuu (Mongolian)

Synonyms: *Motacilla proregulus* (Pallas, 1811)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Morocco; Ireland; Portugal; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Italy; Tunisia; Denmark; Sweden; Czech Republic; Poland; Malta; Hungary; Finland; Latvia; Ukraine; Estonia; Russian Federation; Israel; Kazakhstan; China; Mongolia; Thailand; Lao People's Democratic Republic; Viet Nam; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: It breeds in Khan Höhii, Tarvagatai and Bulnai Mountains and upper Orkhon River (Khangai Mountain Range); Hövsgöl Lake, Eg River and Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers and Bogd Khaan Mountain (Hentii Mountain Range). It migrates through the breeding ranges, dry open habitats, mountain valleys with forest and bushes, river valleys in Gobi-Altai Mountain Range, Herlen-Ulz River basins, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region and the Gobi (Northern and Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. It is one of the most common migrants in Mongolia. Breeding and migrating individuals arrive in Mongolia by late April–early May. Breeding begins in late May–early June. Breeding pairs build their nest, a loosely woven domed cup, in coniferous trees at 0-5 m, sometimes 10 m high in coniferous and mixed forest in mountain taiga forest, forest steppe and river valley forest (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is made of dry thin twigs, other vegetation fibers, tree leaves, and moss. Female lays 4-6 eggs of whitish colour with grayish-brown, or dark-brown fine speckles and spots. The female incubates the eggs for 12-13 days. The female broods and feeds young for 12-14 days. Male helps to feed the young until they fledge. They feed young on flies (Diptera), small moths (Lepidoptera), spiders (Araneae), and their larvae and pupae. They forage high up in canopy and in bushes. After the breeding season and on migration, individuals occur in trees and bushes from taiga forest to Gobi Desert. In open steppe, they follow tall and dense vegetated areas with rocks and cliffs, and bushes, also river valleys with young deciduous trees and bushes. Migrating birds are also found in planted trees and gardens in towns and cities, often in fences and cattle shelter, ruins of buildings near campsites of local herders. Breeding and migrating individuals migrate through the country by late August–mid-September, depending on food availability and weather.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.1. Competitors /Oriental Cuckoo lays its eggs in this species' nest/ 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire / see 1.7./.

Conservation Measures: Approximately 7.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

333. Scientific Name: *Phylloscopus inornatus*

Species Authority: (Blyth, 1842)

Common Names: Inornate Warbler, Yellow-browed Warbler, or Yellow-browed Leaf Warbler (English), Borlog duuchshuvuu or borlog duuch shuvuu (Mongolian)

Synonyms: *Regulus inornatus* (Blyth, 1842)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Morocco; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Hungary; Slovakia; Finland; Latvia; Estonia; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Islamic Republic of Iran; Kazakhstan; Kuwait; Oman; Afghanistan; Pakistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Hong Kong; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at Yolt River and Mönh Khaikhan massif (Khujirt and Uliastai Rivers); Uyench River (Baruunkhurai Depression); Kharkhiraa, Turgen and Khasagt Khaikhan Mountains (Mongol-Altai Mountain Range); Jargalant Khaikhan Mountain, Torkholig and Tes Rivers (Great Lakes Depression); from Khan Höhii Mountain, east to northern Khangai Mountain and eastern Khangai (Khangai Mountain Range); Hövsgöl Lake and Eg River, Darkhad Depression (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range). It migrates through the breeding ground, open habitats and river valleys in Gobi-Altai Mountain Range, South Khangai Depression, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression; oases and mountain valleys in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Sergelen, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Migrating and breeding individuals of the species arrive in Mongolia by late April-early May. Breeding begins by late May-early June. Breeding pairs build their nest on the ground underneath dense grasses and tussocks near springs and creeks in deciduous, mixed forests in mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a loosely woven domed structure with a side entrance, made of dry grass, moss, and dead wood scraps, lined with hairs, and feathers. The female usually lays 5-6, some-

times 7 eggs of white colour, finely speckled and spotted with reddish-brown, purplish-brown, and pale purplish-grey. The eggs are incubated by the female alone for 11-14 days. The young are tended by both parents for 12-13 days. Both sexes feed young on small terrestrial arthropods including grasshoppers (Orthoptera), bugs (Hemiptera), small butterflies and moths (Lepidoptera), dipteran flies (Culicidae), beetles (Coleoptera), spiders (Araneae), and mites (Acari). On migration, it eats plant matter including seeds and berries. On migration, individuals occur, or loose groups of 6-11 individuals in deciduous and mixed forest, dense tall bushes, and scattered trees from forest steppe to Gobi steppe. Migrating individuals are also found in planted trees and gardens in towns and cities, rocky mountains and river valleys with shrubs and bushes in open steppe on migration. Breeding and migrating individuals leave Mongolia for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticide against insects is a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.1. Competitors /Oriental Cuckoo lays its eggs in this species' nest/ 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

334. Scientific Name: *Phylloscopus humei*

Species Authority: (Brooks, 1878)

Common Names: Hume's Leaf-warbler (English), Khumyei duuchshuvuu (Mongolian)

Subspecies in Mongolia: *P. h. humei* (see del Hoyo *et al.* (2006) for further details)

Synonyms: *Reguloides humei* (Brooks, 1878)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: United Kingdom; Belgium; Austria; Islamic Republic of Iran; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Bhutan; Myanmar; Lao People's Democratic Republic; Thailand; Viet Nam; Egypt; Estonia; Finland; France; Germany; Hong Kong; Iraq; Israel; Italy; Kuwait; Netherlands; Norway; Poland; Sweden; Turkey; United Arab Emirates.

Regional Distribution: This species breeds in Mongol-Altai Mountain Range, Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake valley and Eg River (Hövsgöl Mountain Range); upper Minj, Tuul, Terelj, Onon, Balj, Huder, and Bulnai Rivers (Hentii Mountain Range) and Orkhon-Selenge River basins. It migrates through the breeding areas, mountain valley with tall bushes, forested areas and dry open habitats in Southern Khangai Plateau, Mongol Daguur Steppe and Middle Khalkh Steppe (Kozlova, 1930; Tseveenmyadag & Bold, 2006).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migrating and breeding individuals arrive in Mongolia by late April-early May. Breeding begins by late May-early June. Breeding pairs build their nests on the ground underneath forest floor grasses near rivers and springs in coniferous and mixed forest with overgrown thickets and dense wild rose bushes in mountain taiga forest, forest steppe and river valleys (Gombobaatar, 2012). The nest is a loose structure with a side entrance, made of dry grass, moss, and plant stems, lined with softer plants material and hair. Breeding ecology of the species has not been well studied in Mongolia. Del Hoyo *et al.* (2006) mention that the female usually lays 4-5 eggs of white colour with fine speckles and spots. The eggs are incubated by the female alone for 11-14 days. Both parents care for and feed young on small terrestrial arthropods including grasshoppers (Orthoptera), bugs (Hemiptera), small butterflies and moths (Lepidoptera), dipteran flies (Culicidae), beetles (Coleoptera), and spiders (Araneae) for 11-15 days. On migration, it feeds also on plant matter including seeds and berries. On migration, individuals or loose groups of 4-9 individuals occur in coniferous and mixed forest, dense tall bushes, and scattered trees from forest steppe to the steppe. Migrating individuals are also found in planted trees and gardens in towns and cities, rocky mountains and river valleys with shrubs and bushes in open steppe on migration. Breeding and migrating individuals leave Mongolia for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with coniferous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Live-stock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires

/forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticide against insects is a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.1. Competitors /Oriental Cuckoo lays its eggs in this species' nest/ 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

335. Scientific Name: *Phylloscopus borealis*

Species Authority: (Blasius, 1858)

Common Names: Arctic Warbler, Eversmann's Warbler or Arctic Leaf Warbler (English), Umardyn duuchshuvuu or Umardyn duuch shuvuu (Mongolian)

Subspecies in Mongolia: *P. b. borealis* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Phyllopneuste borealis* (Blasius, 1858)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Canada; United States; Mexico; Ireland; Spain; United Kingdom; Faroe Islands; Gibraltar; France; Netherlands; Norway; Luxembourg; Germany; Italy; Denmark; Sweden; Poland; Malta; Greece; Finland; Bulgaria; Russian Federation; Saudi Arabia; Kazakhstan; Oman; India; China; Mongolia; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Australia; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: It breeds in Khangai, Hövsgöl and Hentii Mountain Ranges and Orkhon-Selenge

River basins. It migrates through the breeding areas, open habitats and river valleys in Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, Middle Khalkh Steppe, Herlen-Ulz River basins, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Baruunkhurai Depression; oases and bushy areas in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 50,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 16,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Migrating and breeding individuals arrive in Mongolia by late April- early May depending on weather conditions. Breeding begins by late May-mid-June. Breeding pairs nest in thickets and scrub in coniferous and mixed forests of mountain taiga forest, forest steppe and river forest (Bold *et al.*, 2005; Gombobaatar, 2012). This species nests on the ground and the nest is usually built into dead vegetation so that only the entrance shows, occasionally in shrubby growth 0.6 - 1 m up. The nest has a domed structure with a side entrance composed of moss, dry grass and dead leaves, lined with fine grasses. The female usually lays 5-6 eggs of glossy white colour with light reddish-brown or darker brown fine speckles and spots. The eggs are incubated by the female alone for an unknown period. Both sexes care for and feed young on terrestrial arthropods such as stoneflies (Plecoptera), grasshoppers (Orthoptera), bugs (Hemiptera), small butterflies and moths (Lepidoptera), dipteran flies (Culicidae), small bees (Hymenoptera), beetles (Coleoptera), spiders (Araneae), and mites (Acari), foraging both in trees and bushes and on the ground. They eat plant matter including soft seeds and berries in late autumn and on migration. Individuals occur singly or in very loose groups of 3-5 individuals in areas with scattered deciduous and young coniferous trees, tall bushes and other plants, from forest steppe to desert steppe. Migrating individuals are also found in planted trees and gardens in towns and cities, rocky mountains and river valleys with shrubs and bushes. Their autumn migration continues by late August-early September in Mongolia.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial - Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide insecticide against insects are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey on the species on migration /, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-

breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

336. Scientific Name: *Phylloscopus trochiloides*

Species Authority: (Sundevall, 1837)

Common Names: Greenish Warbler or Greenish Leaf Warbler (English), Nogoovor duuchshuvuu or Nogoovor duuch shuvuu (Mongolian)

Subspecies in Mongolia: *P.t. plumbeitarsus* *P.t. nitidus* (see Sibley & Monroe (1990), BirdLife International (2010), for further details)

Taxonomical Notes: This polymorphic species consists of several different subspecies including *P.t. plumbeitarsus* and *P. t. nitidus* (Sibley & Monroe, 1993; Brazil, 2009; BirdLife International, 2010). However, some bird taxonomists (Sibley & Monroe, 1990; Cramp, 1992; Howard & Moore, 1994; Dawaa *et al.*, 1994, del Hoyo *et al.*, 2006) consider that *Phylloscopus plumbeitarsus* Ticehurst, 1938 (Two-barred Greenish Warbler, Two-barred Warbler or Grey-legged Warbler in English and Khossudalt duuchshuvuu in Mongolian) and *Phylloscopus nitidus* Blyth, 1843 (Bright Green Warbler, Green-breasted Warbler, Green Willow-breasted Warbler, Yellowish-breasted Warbler or Bright Green Leaf Warbler in English and öyehiishar duuchshuvuu or shargal öyehiit duuch shuvuu in Mongolian) are separate species. In the recent publications (Arlott, 2007; Brazil, 2009; BirdLife International, 2010), *Phylloscopus plumbeitarsus* and *Phylloscopus nitidus* are included as subspecies of *P. trochiloides*.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Ireland; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Sweden; Czech Republic; Poland; Slovakia; Romania; Finland; Latvia; Lithuania; Ukraine; Estonia; Belarus; Turkey; Russian Federation; Islamic Republic of Iran; Kazakhstan; Oman; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Hong Kong; Democratic People's Republic of Korea; Republic of Korea.

Regional Distribution: This species breeds from Khovd to Yolt River, Mönh Khaikhan massif, Khovd River and Achit Lake; Kharkhiraa, Turgen and Khasagt Khaikhan Mountains (Mongol-Altai Mountain Range); the delta of Tes and Torkholig Rivers (Great Lakes Depression); Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine zone); Degee, Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It migrates through the nesting areas, dry open habitats, river valleys and forested areas in Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Baruunkhurai Depression and oases in the Gobi (Trans-Altai, Alashani and Eastern Gobi) (Kozlova,

1930; Sergelen, 1986; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Sumiya & Skryabin, 1989; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Regional distribution of *P. t. plumbeitarsus*: This subspecies species possibly nests in Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine zone). It migrates through the nesting areas and according to field observations and the World Distribution Reference, it possibly migrates through Great Lakes Depression, Valley of the Lakes, Baruunkhurai Depression, Trans-Altai and Alashani Gobi.

Regional distribution of *P. t. nitidus*: This subspecies nests in Hövsgöl and Hentii Mountain Ranges (except for alpine zone). It migrates through the breeding areas, open areas and valleys of Tes River, Uvs, Achit and Uureg Lakes (Mongol-Altai Mountain Range); Gurvansaikhan Mountain (Gobi-Altai Mountain Range); Southern Khangai Plateau; Khan Höhii, Tarvagatai-Bulnai Mountains (Khangai Mountain Range); lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Tuul, Terelj, Onon, Balj and upper Herlen Rivers (Hentii Mountain Range); across Valley of the Lakes and low mountain with bushes in Northern and Eastern Gobi (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2005a).

Population: The global population consists of 150,000,000 - 1,000,000,000 mature individuals. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating birds arrive in Mongolia by late April-early May. Breeding begins by late May-early June. Breeding pairs build nests on the ground underneath forest grasses and overgrown thickets surrounded by groves in deciduous and mixed forest in high mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a domed structure with a side entrance and is loosely built of moss, grass and dead leaves, lined with hair. The female usually lays 4-6 eggs of a non-glossy white colour. The eggs are incubated by the female alone, beginning with completion of clutch for an unknown period. The young are tended by both parents for an unknown period. Both sexes feed young on terrestrial arthropods such as stoneflies (Plecoptera), grasshoppers (Orthoptera), bugs (Hemiptera), small butterflies and moths (Lepidoptera), dipteran flies (Culicidae), small bees (Hymenoptera), beetles (Coleoptera), spiders (Araneae), mites (Acari) and larvae of some of these invertebrates. Late migrants eat plant matter including soft seeds and berries. On migration, individuals occur singly or in very loose groups of 4-6 individuals in areas with deciduous, and mixed trees, tall bushes, other plants, and scattered trees from forest steppe to desert steppe. Some migrating individuals are also found in planted trees and gardens in towns and cities, rocky mountains and river valleys with shrubs and bushes in open steppe. Their autumn migration occurs by late August-early September in Mongolia. *P. t. nitidus*: This subspecies nests in deciduous and mixed forests with dense bushes and thickets.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like rodenticide insecticide against insects are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines on migration/; 5. Persecution- 5.1. Pest

control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.1. Competitors /Oriental Cuckoo lays its eggs in this species' nest/ 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

337. Scientific Name: *Phylloscopus tenellipes*

Species Authority: Swinhoe, 1860

Common Names: Pale-legged Leaf-warbler, Pale-legged Leaf Warbler, or Pale-legged Willow Warbler (English), Tsegeenshilbet duuchshuvuu or tsegeen shilbet duuch shuvuu (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; India; China; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: Breeding birds are found in the valley of Tuul and Terelj Rivers. It migrates across open habitats and valleys of Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and upper Herlen Rivers and Bogd Khaan Mountain (Hentii Mountain Range) and Ulz River (Mongol Daguur Steppe) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migrants arrive in Mongolia by late April-early May, depending in weather conditions. Late migrants occur in the country by late May-mid-June.

Breeding ecology of the species is poorly known in the country. The breeding records are doubtful. Due to lack of knowledge of breeding and feeding ecology of the species in Mongolia, we cite here documentation from del Hoyo *et al.* (2006). They mention that breeding habitats are sparse deciduous forest and woodland in river valleys and high hills. They prefer undergrowth and lower branches of trees. Breeding pairs nest on the ground among rotting leaves and roots. The nest is a ball or cup of dried grasses, moss and similar materials. The female usually lays 5-6 eggs of whitish colour. Incubation is 12 days. Both sexes care for and feed young on terrestrial small insects and their larvae for 10-14 days. They forage low in vegetation, or on the ground. On migration, they occur singly in dense bushes and young deciduous forest in river valleys and mountain forest.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticide against insects is a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 25.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

338. Scientific Name: *Sylvia atricapilla*

Species Authority: (Linnaeus, 1758)

Common Names: Blackcap (English), Khalimagt zerjigene (Mongolian)

Subspecies in Mongolia: *S. a. atricapilla* (see Howard & Moore (1994); Shirihai *et al.* (2001); del Hoyo *et al.* (2006) for further details)

Synonyms: *Motacilla atricapilla* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Cape Verde; Senegal; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Niger; Benin; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; South Africa; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Zambia; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Zimbabwe; Turkey; Moldova; Russian Federation; Rwanda; Burundi; Tanzania; Uganda; Cyprus; Malawi; Kenya; Ethiopia; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Seychelles; Uzbekistan; Mongolia.

Regional Distribution: A single individual was recorded in deciduous and mixed forest in Ögöömör valley in Terelj of Töv province in September, 1997 (Bold & Tseveenmyadag, 2002).

Population: The global population consists of 80,000,000 - 200,000,000 mature individuals. Global breeding and resident ranges are estimated at 10,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a vagrant. A single bird was recorded in Terelj forest during migration. According to Shirihai *et al.* (2001), it inhabits open forest with lush understorey, edges of closed forest, riparian forest, parks and gardens with tall trees in urban areas. In non-breeding the species occurs in the forest with fruit trees. In summer, it feeds on insects, spiders and larvae. In non-breeding period, or on migration, it feeds on soft seeds and berries, other fruits.

Habitat Type: Potential habitats follow: 1. Forest (1.1., 1.4. only on migration); 3. Shrub-land (3.3., 3.4. only on migration); 4. Grassland (4.4. only on migration).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3. Extraction- 1.3.1. Mining, 1.7. Fires; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators / Saker Falcon, Eurasian Sparrow Hawk/ 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. Migrating birds pass through some protected areas and Important Bird Areas in the west.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

339. Scientific Name: *Sylvia communis*

Species Authority: Latham, 1787

Common Names: Greater Whitethroat, Eurasian Whitethroat or Common Whitethroat (English), Shövgör zerjigene (Mongolian)

Subspecies in Mongolia: *S. c. rubicola* (see Howard & Moore (1994); Dawaa *et al.* (1994); Shirihai *et al.* (2001); del Hoyo *et al.* (2006) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment.

Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Senegal; Western Sahara; Mauritania; Gambia; Guinea; Morocco; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Togo; Niger; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Gabon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Congo; Sweden; Angola; Namibia; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; South Africa; Hungary; Slovakia; Montenegro; Serbia; Albania; Botswana; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Zambia; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Zimbabwe; Turkey; Moldova; Russian Federation; Rwanda; Tanzania; Uganda; Swaziland; Cyprus; Malawi; Ethiopia; Kenya; Israel; Saudi Arabia; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Seychelles; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia.

Regional Distribution: It breeds at Buyant, Khovd, Yolt and Bulgan Rivers, and Kharkhira, Turgen and Khasagt Khaikhan Mountains (Mongol-Altai Mountain Range); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range); Tes, Nariin and Torkholig Rivers (Northern Uvs Depression and Great Lakes Depression); from Khan Höhii Mountain through Tarvagatai-Bulnai Mountain Ranges to Hentii and Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Hövsgöl Lake, Eg River and Darkhad Depression (Hövsgöl Mountain Range); Minj, Zaan Terelj, and Bogd Mountain, and upper Tuul and Herlen Rivers (Hentii Mountain Range); Bulgan River (Baruunkhurai Depression). It migrates through the breeding and forested areas, river valleys and open steppe in Great Lakes Depression, Khangai and Hentii Mountain Ranges, Valley of the Lakes, Baruunkhurai Depression and oases in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Kozlova, 1930; Sergelen, 1986; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 60,000,000 - 150,000,000 mature individuals. Global breeding and resident ranges are estimated at 14,100,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in Mongolia by late April-early May. Breeding begins in late May-early June. This species nests in thickets, bushes, scrub and young deciduous trees in high mountains, at the edges of mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is placed in low shrub or tall plants, usually about 0.5 m above the ground, rarely on the ground. The nest is a loose-built, fairly deep cup of dry grass and roots, lined with roots and hair, usually dark, with some plant down and wool. The female usually lays 4-5 eggs, rarely 3-7, of glossy very pale blue or green colour with light green or olive, or buff, and darker grey spots or blotches, very fine speckles, mottles or spots. Both adults incubate the eggs for 11-13 days. Young are tended by both parents. Both adults feed young on terrestrial arthropods including beetles, grasshoppers, flies, spiders, and their larvae in the nest for 10-12 days. After breeding season, the young remain near breeding sites. Late autumn and on migration, they feed on available invertebrates and seeds, or fruits of various plants. On migration individuals or very loose groups of 3-6 birds occur in dense bushy areas, young deciduous trees, tall plants, and scattered trees from forest steppe to the Gobi Desert in Mongolia. They also occur in planted trees and gardens in urban areas on migration.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3. , 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with bushes and trees, 5.4. with trees and bushes, also young deciduous trees, 5.5.

with trees and tall bushes on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry-1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

340. Scientific Name: *Sylvia curruca*

Species Authority: (Linnaeus, 1758)

Common Names: Lesser Whitethroat (English), Tarchignaa zerjigene (Mongolian)

Subspecies in Mongolia: *S. c. halimodendri*, *S. c. telengitica* (see Howard & Moore (2003), Shirihai *et al.* (2001) and del Hoyo *et al.* (2006) for further details)

Synonyms: *Motacilla curruca* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Senegal; Mauritania; Gambia; Morocco; Mali; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Niger; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Ethiopia; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Thailand Republic of Korea.

Regional Distribution: It breeds in Kharkhira and Turgen Mountains, Khovd River and Achit Lake (Mongol-Altai Mountain Range); across Mongol-Altai mountains, east to Gobi-Altai mountains (Gurvansaikhan Mountain); Uvs Lake and the delta of Tes Nariin, and Torkholig Rivers (Northern Uvs Depression); Khangai, Hövsgöl and Hentii Mountain Ranges (except high altitudes and dense taiga forest), Herlen-Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee and Nömrög Rivers, and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region); Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, open habitats in river valleys and bushy areas in the Eastern Mongolian Plain, Valley of the Lakes and oases and bushy areas in mountains in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Kozlova, 1930; Sergelen, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 30,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding and passage migrant. Breeding and migrating birds arrive in Mongolia by late April–early May. Breeding begins in late May–early June. Breeding pairs nest in a variety of bushes, scrub, young trees and thickets in high mountains, at the edges of mountain taiga forest, forest steppe, patchy woodland and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). They prefer dark cover, denser than that used by Common Whitethroat. The nest is placed low in a bush or conifer, usually at 0.7-1.2 m, very occasionally up to 3.5 m. The nest is made of fine twigs, dead grass, roots and some dead leaves, and spider cocoons on outside, lined with fine roots and hair, sometimes with plant down, rarely with plant fibre. Female lays 4-6, rarely 3-7 eggs of glossy white or creamy-white colour with olive, or olive- buff and grey spots, blotches or speckles. The eggs are incubated by both sexes for 10-11 days. Young are tended by both parents. The female broods for first few days. Fledging is 10-11 days. Young leave nest when only able to flutter. Both parents and young feed on terrestrial arthropods including small grasshoppers, flies (Diptera), beetles, and ants. In late autumn and on migration, it feeds on berries and soft seeds of various plants. On migration, individuals occur singly or in groups of 4-12 in various habitats such as bushes, scattered trees, tall grasses, young deciduous trees, planted trees and gardens in towns and cities from forest to Gobi Desert in Mongolia. Migrating individuals fly through steppe and mountain valleys with bushes and rocks. Breeding and migrating birds leave Mongolia by late August–early September, depending on weather conditions and food availability.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3. , 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with bushes and trees, 5.4. with trees and bushes, also young deciduous trees, 5.5. with trees and tall bushes on migration); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and

bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

341. Scientific Name: *Sylvia althaea*

Species Authority: Hume, 1878

Common Names: Hume's Whitethroat, Hume's Lesser Whitethroat or Mountain Lesser Whitethroat (English), Uulyn zerjigene (Mongolian)

Taxonomical Notes: The taxon was considered as a subspecies of the Lesser Whitethroat (*Sylvia curruca*). According to Stepanyan (1978, 1990&2003), Fomin&Bold (1991), Sibley & Monroe (1990, 1993), Dawaa *et al.* (1994), Snow *et al.* (1998), Bold *et al.* (2007), BirdLife International (2004, 2008&2010), it is the separate species.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Israel; Saudi Arabia; Islamic Republic of Iran; Bahrain; United Arab Emirates; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Sri Lanka; Mongolia.

Regional Distribution: There are only a few documented breeding records in Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain

Range); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range). Possibly breeds in other high mountains of Mongol and Gobi-Altai Mountain Ranges. It migrates through the breeding areas, across open habitats and river valleys in southern Hövsgöl Mountain Range, Baruunkhurai Depression, oases and bushy areas in the Gobi (Trans-Altai, Northern, Alashani and SW Eastern Gobi) (Fomin & Bold, 1991; Dawaa *et al.*, 1994).

Population: The global population size has not been quantified, but the species is described as probably locally common, although poorly known (del Hoyo *et al.*, 2006). Global breeding and resident ranges are unknown (BirdLife International, 2011).

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding begins by late May to early June. Due to misidentification of the species, breeding records are doubtful in Mongolia. According to Shirihai *et al.* (2001), they prefer to breed in broadleaf woodland, scattered Juniper scrub on mountain slopes and high altitude gullies, lower bushes and shrubs on rocky slopes. Breeding ecology of the species is poorly studied in Mongolia. Breeding pairs nest in trees and bushes at 0.2-1.5 m above the ground. The nest is made of plant stems and dried grasses. The nest is more solid and compact than Lesser Whitethroat's nest, an adaptation to cold night temperatures in high mountains. Female lays 4-5 eggs of greenish-white, or white with brownish-green, or olive brown spots and blotches. The eggs are incubated by both adults for 11 days. Both sexes care for and feed young on terrestrial arthropods like Lesser Whitethroat, and seeds and berries in late autumn and on migration. Migration behavior and pattern has not been studied in Mongolia. By late August-early September, migrants and breeders leave Mongolia for wintering grounds.

Habitat Type: 3. Shrub-land (3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1., 5.4., 5.5. with trees and tall bushes on migration); 6. Rocky areas; 8. Desert (8.2. with trees and bushes on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought;/ 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/.

Conservation Measures: Approximately 9.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

342. Scientific Name: *Sylvia nana*

Species Authority: (Hemprich & Ehrenberg, 1833)

Common Names: Asian Desert Warbler, Desert Warbler or Desert Whitethroat (English), Tsöliin zerjigene (Mongolian)

Subspecies in Mongolia: *S. n. nana* (see Howard & Moore (1994); Dawaa *et al.* (1994); Shirihai *et al.* (2001); del Hoyo *et al.* (2006) for further details)

Synonyms: *Curruca nana* (Hemprich and Ehrenberg, 1833)

Taxonomical Notes: Descriptions of plumage and song of *S. nana* and *S. deserti* have documented diagnostic differences between these taxa. These data suggest that Desert Warbler is best treated as two monotypic species; Asian Desert Warbler *S. nana* (monotypic) and African Desert Warbler *S. deserti* (monotypic) (Shirihai *et al.*, 2001; Sangster *et al.*, 2004). According to Howard & Moore (1994), Shirihai *et al.* (2001), AERC TAC (2003), del Hoyo *et al.* (2006), the correct common name of the species is the Asian Desert Warbler.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Cape Verde; Western Sahara; Mauritania; Morocco; Mali; Portugal; Spain; Algeria; United Kingdom; Niger; Netherlands; Germany; Italy; Tunisia; Denmark; Libyan Arab Jamahiriya; Sweden; Malta; Finland; Sudan; Egypt; Turkey; Russian Federation; Cyprus; Ethiopia; Israel; Saudi Arabia; Jordan; Eritrea; Iraq; Somalia; Djibouti; Yemen; Islamic Republic of Iran; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; China; Mongolia.

Regional Distribution: This species breeds in valleys of Achit Lake (Mongol-Altai Mountain Range); Northern Uvs Depression and Great Lakes Depression; from Zavkhan Desert Steppe Depression to Southern Khangai Plateau and Valley of the Lakes; from Baruunkhurai Depression, east to the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (northernmost range limits occur 100 km north of Sainshand town). It migrates through the breeding areas and dry open habitats in the Gobi. No records occur from Middle Khalkh Steppe and southern Hentii Mountain Range (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in Mongolia by late April-mid-May. Breeding period begins by early-mid-June. Breeding pairs build their nest in dry open habitats with dense bushes and scrub (*Caragana* spp.) in desert steppe, Caragana steppe and the Gobi Desert (Gombobaatar, 2012). The nest is placed low in bushes up to 1 m high. The nest is a deep, and solid cup of dried grasses and plant stems, lined with finer grasses, hair, spider's webs, and feathers. It is the adaptation to strong wind in open habitats. Female lays 4-6 eggs with ground colour with bluish tinge. Both adults incubate the eggs. Breeding ecology of the species has not fully studied in Mongolia. It feeds on terrestrial arthropods including small caterpillars, ants, spiders, and moth. After the breeding season and on migration, it eats seeds and fruits. They forage on the ground or in bushes, jumping from branch to branch of a bush. On migration, individuals occur in bushes, scrub, and tall grassy areas in desert steppe, valleys of high mountains and Gobi Desert.

Habitat Type: 3. Shrub-land (3.4.); 4. Grassland (4.4.); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/,

1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial / land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 17.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sylviidae

343. Scientific Name: *Sylvia nisoria*

Species Authority: (Bechstein, 1795)

Common Names: Barred Warbler (English), Kharsuun zerjigene (Mongolian)

Subspecies in Mongolia: *S. n. merzbacheri* (see Howard & Moore (1994); Shirihai *et al.* (2001); del Hoyo *et al.* (2006) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Iceland; Sierra Leone; Ireland; Spain; Faroe Islands; France; Belgium; Nigeria; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Czech Republic; The Democratic Republic of the Congo; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Tanzania; Uganda; Cyprus; Malawi; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia.

Regional Distribution: It breeds in Khovd River and Achit Lake valleys (Mongol-Altai Mountain Range); from the central region of Tes River valley, the delta of Torkholig River, northern Uvs Lake, south to Jargalant Khairkhan Mountain and Zereg Depression (Great Lakes Depression); down to southern

Shargyn Gobi; from southern Mongol-Altai Mountain Range to Baruunkhurai (Bulgan and Bodonch River valleys); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range). It migrates through the breeding areas, open habitats with trees, tall bushes and oases in Trans-Altai, Alashani and SW Eastern Gobi (Kozlova, 1930; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003).

Population: The global population consists of 2,000,000 - 6,000,000 mature individuals. Global breeding and resident ranges are estimated at 20,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migrating and breeding birds arrive in Mongolia by late April-mid-May. Breeding begins in late May-early June. Breeding pairs nest in tall thick bushes, scrub, thickets and scattered bushes in the valleys of high mountains, rarely at the edges of mountain forest in river and lake valleys (Gombobaatar, 2012). This species breeds in thickets and shrubs of woodland edge or clearings, riverine woodland, parkland, orchards and large hedgerows. The nest is placed in a fork or among thinner stems 0.4-2.8 m up. The nest is a loosely-built, deep cup of dead grass stems, lined with fine roots and hair, sometimes spiders' cocoons. Female lays 5 eggs of glossy pale whitish-grey, or faintly blue-grey or greenish-grey colour with very pale blue-grey, purplish-grey or buffish-grey speckles, spots, mottles or blotches. The eggs are incubated by both sexes for 12-15 days. Both adults care for and feed young on terrestrial insects including beetles (Coleoptera), Lepidoptera, and their larvae, spiders, caterpillars, and small grasshoppers. The young can leave the nest at 11-15 days. In autumn and on migration, they eat seeds and berries. On migration, individuals or small flocks of 3-6 individuals occur in forest edges, dense bushy and tall vegetated areas, mountain valleys with scattered trees and forages in bushes and young trees, or on the ground.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with tall sedges and reeds on migration, 5.3. on migration); 6. Rocky areas (only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal and other minerals have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire / see 1.7./.

Conservation Measures: Approximately 16.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Timaliidae

344. Scientific Name: *Panurus biarmicus*

Species Authority: (Linnaeus, 1758)

Common Names: Bearded Parrotbill, Bearded Tit, or Reedling (English), Sakhaltshagshuurgabyalzuukhai or sakhalt h h bukh (Mongolian)

Subspecies in Mongolia: *P. b. russicus* (see del Hoyo *et al.* (2007) for further details)

Synonyms: *Parus biarmicus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, reed cutting, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Lebanon; Syrian Arab Republic; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia; Japan.

Regional Distribution: This species breeds at Achit Lake valley (Mongol-Altai Mountain Range); Uvs, Khar-Us, Khar, D rg n Lakes valley and Zereg Depression (Great Lakes Depression); B ontsagaan Lake (Valley of the Lakes); lower Orkhon, Selenge, Kharaa, and Yer o River valleys (Orkhon-Selenge River basins); lakes in Tuul, Onon, and Balj River valleys (Hentii Mountain Range); Herlen-Ulz River basins; lakes and rivers in Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, N mr g and Azarga Rivers, and Buir, Tashgain Tavan and Khonkhor Lakes (Buir Lake-Khalkh River-Khyangan region). It breeds in reed beds possibly in Shargyn Tsagaan Lake (South Shargyn Gobi), Alag Lake (Trans-Altai Gobi) and Orog Lake (SE Khangai Mountain Range) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 1,500,000 - 6,000,000 mature individuals. Global breeding and resident ranges are estimated at 10,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. This species inhabits among extensive growths of reeds sedges in swampy ground of mountain taiga forest, forest steppe, mountain steppe (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build their nest among stems near the edge of a stand of reeds or sedge, usually set near the ground. The nest is built by both adults and is a deep cup of dead leaves of reeds and sedges, lined with reed-flower heads and sometimes some feathers. The female usually lays 5-7 eggs of glossy creamy-white colour with dark brown, or reddish-brown sparse sprinkles, tiny short streaks, or specks. Both sexes incubate the eggs for 12-13 days. Both parents feed young on invertebrates and their larvae, including springtails, moths, crane-flies (Tipulidae), mosquitoes (Culicidae), non-biting midges (Chironomidae), beetles, spiders and

slugs for 9-12 days in the nest. Young birds stay together with adults near breeding areas. In autumn and winter, they forage plant matter (seeds) in reeds, and rarely fruits, in pairs or larger groups of 10-50 individuals. In late autumn and winter, they occur in areas with tall plants, occasionally bushes, or forest edges near breeding reed beds, feeding on seeds in reeds, very rarely on the ground. They move to neighbouring reed beds in late autumn and winter.

Habitat Type: 3. Shrub-land (very rarely found in 3.4. on feeding and seasonal movement); 5. Wetlands (large reed beds close to 5.1., 5.4., 5.5., 5.16. in only eastern Mongolia); 12. Artificial – Aquatic (large reed beds near 12.1., 12.6. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock in reed beds all year around in feeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- /building of human settlements for army base camps and gers of local people around breeding reed beds of the lakes are major disturbances for the species/, 1.7. Fires /steppe fires may burn breeding habitats very often in spring and autumn /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by human activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Badger (*Meles meles*), Grey Wolf (*Canis lupus*) and harriers during the breeding season/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance-10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Timaliidae

345. Scientific Name: *Paradoxornis webbiana*

Species Authority: (Gould, 1852)

Common Names: Vinous-throated Parrotbill, Webb's Parrotbill, Webb's Crowtit, Rufous-headed Crowtit or Brown Crowtit (English), Amurag khuragchbor (Mongolian)

Subspecies in Mongolia: *P. w. mantschuricus* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2007) for further details)

Synonyms: *S. webbiana* (Gould, 1852), *Suthora webbiana* (Gould, 1852)

Taxonomical Notes: It has been attributed to *Suthora* genus. However, BirdLife International Taxonomy working groups (2011) considered that this should belong to genera *Paradoxornis* or *Sinanparadoxornis*.

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; China; Mongolia; Viet Nam; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: Birds were recorded in dense tall reed beds and bushes in Khalkh, Nömrög and Altan River valleys of Dornod province (Fomin & Bold, 1991; Dawaa *et al.*, 1994).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 3,910,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The records of the species in the country are doubtful, due to uncertain date and location. The birds were found during the breeding season. It might be a breeding species in areas of the east, but this remains unconfirmed. It inhabits reed beds along river valleys and dense thickets and bushy areas in river valleys and edges of freshwater lakes and mountains. Date and duration of the species' presence in Mongolia is unknown. According to del Hoyo *et al.* (2007), it feeds on seeds, flowers, fruits and buds, also insects and larvae. They migrate to wintering grounds presumably by late August-early September, like other migrants in the country. In October-January, they have been noted in South Korea, occurring in pairs or more often in large flocks of up to 140 individuals. Habitat Type: 3. Shrub-land (3.4. along river valley); 5. Wetlands (large reed beds close to 5.1., 5.4., 5.5., 5.16. in only eastern Mongolia on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / overgrazing of livestock in reed beds all year around in feeding and migrating sites of the species is a cause of habitat degradation/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- / building of human settlements for army base camp and ger of local people around breeding reed beds of the lakes are major disturbances for the species/, 1.7. Fires /steppe fires may burn possible breeding habitats very often in spring and autumn /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by human activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding sites/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought/; 10. Human disturbance-10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, it migrates through eastern Mongolian protected areas and Important Bird Areas of Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Timaliidae

346. Scientific Name: *Paradoxornis heudei*

Species Authority: David, 1872

Common Names: Reed Parrotbill, Yangtse Parrotbill, or Heude's Parrotbill (English), Bakhimkhushuut khuragchbor (Mongolian)

Subspecies in Mongolia: *P. h. polivanovi* (see del Hoyo *et al.* (2007) for further details)

Taxonomical Notes: *Paradoxornis heudei* (Sibley & Monroe, 1990&1993) was split by Stepanyan (1998) into *P. heudei* and *P. polivanovi* but the BirdLife Taxonomic Working Group prefers to follow the treatment of Penhallurick & Robson (2009) who resist this split (BirdLife International, 2011).

Global Status: Near Threatened

Regional Status: Endangered, B1, B2 a,b(i,ii)

Rationale for Assessment: This species has been assessed as Endangered. The assessment is based on occurrence and occupancy. Extent of occurrence is less than 5,000 km² and area of occupancy is less than 500 km² due to livestock grazing and fires. Area of occupancy is fragmented less than 5 locations.

Continuing decline in extent of occurrence, and area of occupancy has been reported. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009- Endangered

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; China; Mongolia.

Regional Distribution: This species nests and winters in dense tall reed beds (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) along Tashgain Tavan Lake and the delta of Khalkh River (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: In Mongolia, this is a resident breeder in the east. It inhabits dense reed beds up to 2-3 m tall growing in river banks, river deltas, lake valleys and islands of rivers. The habitat is shared with Bearded Tit. Breeding pairs build a nest in 6-7 days, suspending it 1.3-1.7 m from the ground between two or three reed stems. The nest is a cup-shaped structure made of strips of dead reed sheaths, rimmed and lined with reed stem filaments. External diameter is 8.0-8.2 cm, internal diameter 5.1-5.5 cm, height 9.5-10 cm, and depth 6-6.5 cm. Female lays 2-5 eggs of slightly glossy greenish-white colour with large pale sienna spots, blotches and small creamy-white, inky-purple, or reddish-brown spots. Both sexes incubate the eggs for c. 12 days. Incubation and fledging periods are poorly known. Both parents feed young on insects and larvae, including grasshoppers and crickets. The birds make loud sounds when tearing open reed stems to obtain food, inserting the point of the bill into entrance holes made by insects in reeds and cutting through stems with the bill. In breeding season, the species occurs in pairs. In the non-breeding season, they are found in pairs or groups of 5-20 individuals feeding on edges of reed beds and in dense reed beds. Feeding ecology in winter is almost unknown in Mongolia. In autumn and winter they move between closely situated reed beds. The species is highly dependent on the condition of the reed beds in the eastern region.

Habitat Type: 3. Shrub-land (very rarely found in 3.4. on feeding and seasonal movement); 5. Wetlands (large reed beds close to 5.1., 5.4., 5.5., 5.16. in only eastern Mongolia).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock in reed beds all year around in feeding and breeding sites of the species is a cause of habitat degradation/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- /building of human settlements for army base camps and ger of local people around breeding reed beds of the lakes are major disturbances for the species/, 1.7. Fires /steppe fires may burn breeding habitats in spring and autumn /; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by human activities are a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from transport close to busy road and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Badger (*Meles meles*), Grey Wolf (*Canis lupus*), and Harriers during the breeding season, and Saker Falcon in winter/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/, 9. Intrinsic factors- 9.5. Low densities-9.9. Restricted range /due to low density and restricted breeding range are cause of low breeding success and decrease in species abundance/; 10. Human disturbance-10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997) and included in the International Red Book. Approximately 21.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Regulidae

347. Scientific Name: *Regulus regulus*

Species Authority: (Linnaeus, 1758)

Common Names: Goldcrest or Goldcrested Wren (English), Sharmelzen zaduulai or Shar melzen tanan byalzuukhai (Mongolian)

Subspecies in Mongolia: *R. r. japonensis*, *R. r. coatsi* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Israel; Lebanon; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range). It migrates through the breeding areas, open dry habitats and valleys of Herlen-Ulz River basins, Buir Lake-Khalkh River-Khyangan Mountain region (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 80,000,000 - 200,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor, passage migrant and winter visitor. Breeding and migrating birds occur in Mongolia by late April-early May. Breeding begins in late May-mid-June. Breeding pairs nest in coniferous trees in coniferous and mixed forest with thickets in mountain taiga, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is suspended in a fork of twigs under foliage near the end of a conifer branch, or in a sheltered fork. The nest forms a deep thick cup, built up tight against the foliage and twigs above so that access to the small egg-cavity may be re-

stricted. The nest is made of moss, lichens and spiders' webs, the latter being also used to bind it to the supporting twigs, lined with feathers. Built by both birds, but the male's assistance varies. The female usually lays 7-10 eggs of a non-glossy white to very pale buff, very finely speckled with drab buffish-brown, or faint purplish or greyish-brown, largely confined to a zone encircling or capping the larger end. The eggs are incubated by the female alone for 14-17 days. Young spend 16-21 days in the nest. Both parents feed young on small arthropods with soft cuticles, such as springtails, caterpillars, bugs, flies, small crickets, and the cocoons and eggs of spiders and insects, and occasionally take pollen. Individuals catch flying insects while hovering. The Goldcrest feeds in trees, frequently foraging on the undersides of branches and leaves. Outside the breeding season, small groups of Goldcrests feed on plant matter including soft seeds and berries. On migration, individuals or small loose flocks occur at forest edges, in mixed and coniferous trees in the lake and river valleys, dense and tall bushes and shrubs in open habitats with rocks and cliffs, in planted trees and gardens in urban areas. In winter single birds are seen near forest areas with thick bushes and scrub near forest, river valleys with dense forest, and gardens of urban areas.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (inland) (5.1. with deciduous and mixed trees, 5.3., 5.5., 5.13. with trees and bushes); 6. Rocky areas (only on migration); 8. Desert (8.2. with trees and bushes on migration); 11. Artificial - Terrestrial (11.2., 11.3., 11.4. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide insecticide against insects are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic -6.2.3. Commercial or Industrial /land pollutions caused by mining and industrial activities are a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Troglodytidae

348. Scientific Name: *Troglodytes troglodytes*

Species Authority: (Linnaeus, 1758)

Common Names: Winter Wren, Wren, Northern Wren or European Wren (English), Khalgaich uragchin or uran byalzuukhai (Mongolian)

Subspecies in Mongolia: *T. t. dauricus* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla troglodytes* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Canada; United States; Mexico; Saint Pierre and Miquelon; Bermuda; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species inhabits and migrates through thickets and undergrowth with heaps of fallen branches or trees in forest steppe and valleys of Onon, Balj (Hentii Mountain Range), Khalkh, Degee, and Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region), Ulz and Herlen Rivers (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2005a).

Population: The global population consists of 200,000,000 - 1,000,000,000 mature individuals. Global breeding and resident ranges are estimated at 21,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. It prefers thickets and undergrowth with dense young deciduous trees, and dense branches of deciduous trees in forested areas and river valleys. The species migrates through the above-mentioned areas by late May-early June (spring migration) and by late August-early September (autumn migration), depending on food availability and weather conditions. Migration and feeding ecology of the species in Mongolia is poorly known. According to del Hoyo *et al.* (2005), its diet consists of arthropods including spiders, beetles (Coleoptera), and their larvae. It also catches small fishes and young frogs. In autumn and winter it eats berries and seeds. It forages low in vegetation and low in trees. The species usually occurs singly or in pairs. This species may breed in the above-mentioned areas of the country.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 11. Artificial - Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding site of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near possible breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning an individual/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and possible breeding sites/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and possible breeding seasons/, 9. Intrinsic factors- 9.5. Low densities-9.9. Restricted range / low density and restricted breeding range might be a cause of low breeding success and possibly decrease in species abundance/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sittidae

349. Scientific Name: *Sitta europaea*

Species Authority: Linnaeus, 1758

Common Names: Wood Nuthatch, Nuthatch or Wood Nuthatch (English), Öрниин тоншголжин or тоншголжин (Mongolian)

Subspecies in Mongolia: *S. e. asiatica* (see Svensson (1992); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Portugal; Spain; United Kingdom; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland;

Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova; Russian Federation; Lebanon; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds through Mongol-Altai Mountain Range, from lower Khovd to Bulgan River, Mönh Khairkhan Mountain Massif through SW ranges of the later massif; from Ölgii town to lower part of Khovd River; Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); N Uvs Lake, lower Torkholig and Tes Rivers (from Bayantes to lower) (Northern Uvs Depression); from Khan Höhii, east to upper Onon, Balj and upper Uz rivers, north to country border, south to N Khangai range and upper Orkhon, Tuul and upper Herlen Rivers (Khangai, Hövsgöl and Hentii Mountain Ranges); Khalkh, Degee and Nömrög Rivers, and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It winters in breeding areas, natural forests, planted trees and gardens at settlements from Mongol-Altai Mountain Range across the Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges to Middle Khalkh Steppe and Mongol Daguur Steppe (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 50,000,000 - 250,000,000 mature individuals. Global breeding and resident ranges are estimated at 23,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are large deciduous, mixed or coniferous trees in mountain taiga forest, forest steppe and patchy woodland in river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs nest in a hole in a tree or wall, sometimes in an old woodpecker hole or nest-box. The nest is a loose cup of bark chips and flakes and dead leaves. The nest is built mainly by female. The female usually lays 6-9 eggs of moderately glossy white colour with light red, reddish-brown, reddish-purple and some faint purple speckles, spots and blotches. The eggs are incubated by the female alone for 14-18 days. Male feeds the female while she incubates the eggs. Both parents care for and feed young on forest insects and their larvae in the nest for 23-25 days. The young remain with parents after breeding season and forage together on trunks of deciduous and conifer trees. Individuals occur singly and in pairs, climbing on tree trunks, often joining flocks of other tits. During seasonal movements and in winter, they are found in pairs or small loose flocks of 2-6 individuals in deciduous, coniferous, mixed forest, forest edges, trees in river valleys and forest steppe, and gardens in towns and cities.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (deciduous, coniferous and mixed forests with tall bushes and shrubs along valleys of 5.1.- 5.3., 5.5., 5.13.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk

and Sparrowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sittidae

350. Scientific Name: *Tichodroma muraria*

Species Authority: (Linnaeus, 1766)

Common Names: Wallcreeper (English), Hermin byalzuukhai (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Netherlands; Luxembourg; Germany; Switzerland; Italy; Liechtenstein; Austria; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Ukraine; Bulgaria; Turkey; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan.

Regional Distribution: This species breeds from Höh Serh massif, Jargalant Khairkhan to upper Uyench, east to Gurvansaikhan Mountain (Mongol-Altai and Gobi-Altai Mountain Ranges). It is found in cliffs in Chingis mountain (S Khangai Mountain Range), and Zorgol Khairkhan (more south of Tuul River valley) (Kozlova, 1930; Potapov, 1986; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Bayarkhuu, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005). It was recorded in rocky mountains with cliff faces in Choir, Ih Sansar, Darkhan, Yazaar and Toono Mountains (Middle Khalkh Steppe) in April of 2006 (Gombobaatar *et al.*, 2007) and single individuals in Öndörjargalant at Gurvanbulag of Bayankhongor province and Sharyngol of Selenge province (Sh. Boldbaatar pers. comm.).

Population: The global population consists of 250,000 - 1,200,000 mature individuals. Global breeding and resident ranges are estimated at 5,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. It breeds on cliffs and steep rock faces or high stone walls near springs and rivers in high mountains (Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is placed in a cave, hole or crevice, often deeply hidden. The nest

is a cup of moss, grass, roots and wool; lined with hair and feathers. Female builds the nest, and usually lays 4, sometimes 3-5 eggs of moderately glossy white, with a sprinkling of fine black or dark brown specks, and sometimes a few larger spots and faint grey marks at the larger end. Female incubates the eggs alone for 18-19 days. Both sexes feed and care for the young, feeding them on terrestrial invertebrates—primarily insects and spiders—gleaned from rock faces. It sometimes also chases flying insects in short sallies from a rock wall perch. Feeding birds move across cliff faces in short flights and quick hops, often with their wings partially spread, by c.21-26 days. After the breeding season, the young birds and adult birds stay close to each other and feed on rock walls and cliff, sometimes at edges of mountain creeks and springs. In winter, it moves down into the valleys, where it is found on steep slopes and shoreline precipices. They climb about on cliff walls and on rocks, constantly fluttering their wings. Flight is reminiscent of a butterfly.

Habitat Type: 5. Wetlands (5.1., 5.2. During seasonal movements and feeding); 6. Rocky areas.

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./ 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the nest during early breeding/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/.

Conservation Measures: Approximately 20.6% of the species' range in Mongolia occurs within protected areas.

351. Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Certhiidae

Scientific Name: *Certhia familiaris*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Treecreeper, Treecreeper or Common Treecreeper (English), Huvchiin byalzuumar or tsarmyn byalzuumar (Mongolian)

Subspecies in Mongolia: *C. f. daurica* (see Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging and human disturbance, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Ireland; Spain; United Kingdom; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova; Cyprus; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Kyrgyzstan; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds through the main range of Mongol-Altai, from upper Khovd River to Yolt River, Kharkhira and Turgen Mountains (Mongol-Altai Mountain Range); lower Torkholig and Tes Rivers (Bayantes sum to the country border) (Northern Uvs Depression); from Tarvagatai and Bulnai Mountains to Hentii Mountains, north to the country border, south to upper Orkhon River valley, east to upper Tuul, Onon, Balj, and Herlen Rivers (Hentii Mountain Range); Hövsgöl Mountain Range; possibly nests in Khyangan Mountain Range. It winters in the breeding areas and forested areas in Orkhon-Selenge River basins, Ulz River basin and upper Herlen River valley (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 35,000,000 - 150,000,000 mature individuals. Global breeding and resident ranges are 20,500,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are deciduous, coniferous and mixed forests with large trees in higher altitudes, in taiga forest and mountain forests. Breeding pairs nest in the narrow space behind loose bark on a tree, or in a tree crevice. Both sexes build the nest, a loose cup of twigs, roots, moss and grass, lined with feathers, fine bark and wool. The female lays usually 6, occasionally 3-9 non-glossy white eggs with pink or reddish-brown, very fine speckles or spots. The female incubates the eggs alone for 14-15 days. Both parents care for and feed young on invertebrates on tree trunks at 14-16 days. It starts near the tree base and working its way up using its stiff tail feathers for support and using its long thin bill to extract insects and spiders from crevices in the bark. Just after leaving the nest, young fly weakly but climb well. The species occurs in pairs in the breeding season. They occur in deciduous, coniferous and mixed forest, also gardens in towns and cities. Although normally found on trees, it will occasionally hunt prey items on walls, bare ground, or amongst fallen pine needles, and may add some conifer seeds to its diet in the colder months. By late spring, they move up to its breeding site.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements and in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Northern Goshawk and Spar-

rowhawks in breeding and during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sturnidae

352. Scientific Name: *Acridotheres cristatellus*

Species Authority: (Linnaeus, 1766)

Common Names: Crested Myna, Chinese Mynah or Chinese Jungle Mynah (English), Tolit khartotol (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada; United States; Argentina; China; Myanmar; Lao People's Democratic Republic; Viet Nam; Taiwan. It has been introduced to Brunei Darussalam; Malaysia; Philippines; Singapore; Japan; Thailand.

Regional Distribution: A single bird was found in Khalkh River valley of Dornod province in June (A. Bräunlich pers. comm.).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species lives in close association with human habitation. It naturally occurs in open country, such as cultivated areas, floodplains and grasslands near trees and bushes. It consumes a wide variety of food types, including frogs, snails, birds' eggs and nestlings and other animal matter, as well as fruits and seeds. Typically, it scavenges on the ground at refuse heaps in urban areas, and in rural areas. They often feed in small flocks (del Hoyo *et al.*, 2009). The record in eastern Mongolia is doubtful. However, this species has been listed in various references (Gombobaatar, 2009).

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 11. Artificial – Terrestrial (11.2., 11.3., 11.4., 11.5. only on migration).

Dominant threats: Potential dominant threats follow;

Habitat Loss and Degradation (human-induced)- 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 8. Changes in native species dynamics- 8.2. Predators; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport.

Conservation Measures: Specific conservation measures have not been implemented for this species. Migrants may pass through some protected areas and Important Bird Areas in eastern Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sturnidae

353. Scientific Name: *Sturnia sturninus*

Species Authority: (Pallas, 1776)

Common Names: Purple-backed Starling or Daurian Starling (English), Khurgan todloi or khurgan todol (Mongolian)

Synonyms: *Sturnus sturninus* (Pallas 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United Kingdom, Norway, Russian Federation, Yemen, Pakistan, India, China, Mongolia, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Hong Kong, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species nests in tree holes in dense groves and forest edges in Khalkh River valley and Ih Khyangan Mountain range. It has been observed in upper Tuul, Onon, and Balj River valleys (Hentii Mountain Range), Khangai Mountain Range, Orkhon-Selenge River basins, Herlen-Ulz River basins, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain and Buir Lake on migration (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in Mongolia by late April-early May. Breeding ecology of the species is poorly known in the country. Breeding birds are found in old deciduous forest with young deciduous trees and dense shrubs in river valleys and lakes, and forest steppe. Breeding pairs nest in holes, usually in trees. They use old nest holes made by woodpeckers in trees. The nest is placed 3-10 m high above the ground. Both adults build nest of dry grasses, sedges, leaves, rootlets, and artificial materials, lined with softer grass, plant down and feathers. The female usually lays 5-6 rarely 3-7 eggs of glossy pale blue colour without markings. Both adults, but chiefly the female, incubate the eggs. Duration and behavior of incubation and fledging are still unknown in Mongolia. Adult birds care for the young and feed them on terrestrial invertebrates including earthworms, caterpillars, grasshoppers in open areas of woodland, meadows and marshy areas near breeding site. In autumn and on migration, they forage seeds and berries in trees and on the ground. Fledged young birds always remain in their family and migrate together to wintering grounds. Migrating birds occur in small to large flocks of 6-30 individuals feeding on the ground and trees in eastern Mongolia. Migrants leave the country for wintering grounds by late August-early September.

Habitat Type: 1. Forest (by edge of 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (5.1. with deciduous and mixed forest).

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat deg-

radation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sturnidae

354. Scientific Name: *Sturnus roseus*

Species Authority: (Linnaeus, 1758)

Common Names: Rosy Starling, Rose-colored Starling or Rosy Pastor (English), Yagaan todol or yagaan jimsen todol (Mongolian)

Synonyms: *Turdus roseus* (Linnaeus, 1758); *Pastor roseus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Iceland; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Egypt; Turkey; Moldova, Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Seychelles; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Sri Lanka; Nepal; Mongolia; Bangladesh; Thailand; Malaysia; Viet Nam, Singapore; Hong Kong.

Regional Distribution: This species breeds in the valleys of Buyant, Khovd, (Mongol-Altai Mountain Range), Bulgan and Uyench River valleys (Baruunkhurai Depression). Birds have been observed at Gobi-Altai Mountain Range, Northern Uvs Depression, Great Lakes Depression, Gobi (Trans-Altai, Alashani and Eastern Gobi) and Ögii Lake valleys (Khangai Mountain Range) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2008). A single bird was seen in Bayankhongor city of Bayankhongor province (Sh. Boldbaatar pers. comm.).

Population: The global population consists of 500,000 - 2,500,000 mature individuals. Global breeding and resident ranges are estimated at 5,910,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant in the west. Breeding and migrating individuals arrive in summering and breeding sites by late April-early May. Breeding pairs nest in holes in rocks, ruins, stone walls, or in ground in open habitats near natural and planted trees, rocky mountains, and river valleys. Usually breeds in colonies which may change nesting area from year to year. The nest is an untidy mass of grass, plant stems and leaves, lined with roots, feathers and hair. The clutch consists of 3-6 eggs of slightly glossy very pale blue, or pale azure colour. Eggs are incubated at daily intervals and are incubated by the female alone, sometimes beginning before completion of clutch, for 11-14 days. Both adults care for and feed young on terrestrial invertebrates such as grasshoppers, crickets, beetles, ants, moths, spiders, snails, and their larvae in the nest for 14-19 days. The young remain in their family and forage the above-mentioned invertebrates, and plant matter such as seeds and fruits in trees and on the ground. It forms flocks of 7-90 individuals on migration and is found in open habitats with plenty of insects (grasshoppers) near forests and river valleys. This species has been used as a natural bio-regulator of Mönkhkhairkhan grasshoppers in the west. Most breeding and migrating individuals leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. with deciduous and mixed forest); 11. Artificial – Terrestrial (11.2. only on migration, 11.3., 11.4., 11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species/.

Conservation Measures: Approximately 14.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sturnidae

355. Scientific Name: *Sturnus vulgaris*

Species Authority: Linnaeus, 1758

Common Names: Common Starling, Starling, European Starling or Purple-winged Starling (English), Khar todol (Mongolian)

Subspecies in Mongolia: *S. v. poltaratskyi* (see Howard & Moore (1994); Feare *et al.* (1999); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada; United States; Mexico; Cuba; Panama; Cayman Islands; Jamaica; Haiti; Bahamas; Argentina; Turks and Caicos Islands; Dominican Republic; Aruba; Netherlands Antilles; Puerto Rico; Saint Pierre and Miquelon; Bermuda; Iceland; Cape Verde; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova, Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Yemen, Armenia; Islamic Republic of Iran, Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; Maldives; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Viet Nam; Australia; Hong Kong; Taiwan, Republic of Korea; Japan; Vanuatu; New Zealand; Fiji; Tonga.

Regional Distribution: This species breeds at Buyant and Khovd Rivers (Mongol-Altai Mountain Range and Great Lakes Depression); in Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest and high altitude areas); Orkhon-Selenge River basins and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas and Great Lakes Depression, Valley of the Lakes, Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region and the Gobi (Trans-Altai, Alashani, Northern and Eastern Gobi) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008). One bird was photographed carrying food in its beak 300 m from N Khalkh River military check point, Dornod province in July, 2009. We presume that it might be a breeding in this area (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 310,000,000 mature individuals. Global breeding and resident ranges are estimated at 17,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating birds arrive in the country by late April-early May. Breeding begins in late May-early June. Breeding pairs nest in holes of trees, rocks, and buildings in deciduous mixed forest and planted trees, in moun-

tain forest and forest steppe, near settlements and in lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is made of stems, leaves and other plant material, the cup lined with feathers, wool and moss. Male begins nest before pairing, female completes nest. The female usually lays 5-7, rarely 4-9 eggs of slightly glossy very pale light blue, varying in tint. The eggs are incubated by both sexes for 12-15 days. Both adults care for the young and feed them on terrestrial insects and their larvae at 20-22 days. Its food consists of various invertebrates and grains, as well as items from rubbish dumps and fields. The young stay in their family and forage on the ground and migrate together. On migration, they form flocks of 7-20 individuals, occurring in open habitats near rivers valleys and planted trees in towns and cities. The flocks leave their breeding and summering sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4. on feeding); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. with deciduous and mixed forest); 11. Artificial – Terrestrial (11.2. only on migration, 11.3., 11.4., 11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting / logging, particularly of trees with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial- 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Sturnidae

356. Scientific Name: *Sturnus cineraceus*

Species Authority: Temminck, 1835

Common Names: White-cheeked Starling or Grey Starling (English), Bor todol (Mongolian)

Synonyms: *Spodiopsar cineraceus* Temminck, 1835

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation; China; Mongolia; Myanmar; Thailand, Viet Nam; Taiwan, Philippines; Democratic People's Republic of Korea, Republic of Korea; Japan;

Regional Distribution: This species breeds in Zelter, Tarvagatai Mountains and Urd Tamir River basin (Khangai Mountain Range); Hövsgöl Lake and Eg River valley (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa, and Yeröö River valleys (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen River valleys (Hentii Mountain Range); upper Ulz River valley; Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög, Azarga, and Galdastai River valleys (Buir Lake-Khalkh River-Khyangan region). Range of the species has extended in the country for last decade. It migrates through the breeding areas and Great Lakes Depression (Sh. Boldbaatar pers. comm.) Eastern Mongolian Plain, Eastern Gobi (Bus Lake) and Ehiin Gol oases in Trans-Altai Gobi (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding, summering and migrating individuals arrive in the country by late April-early May. Breeding begins in late May-early June. Breeding pairs nest in holes of deciduous mostly poplar tree in deciduous and mixed forests in high mountains, edge of mountain taiga, forest steppe, river valley and patchy woodland in mountain steppe (Bold *et al.*, 2005; Gombobaatar, 2012). They nest in colonies of up to 20 breeding pairs. The nest is made of dry grasses, stems, and leaves lined with softer plant matter and feathers. The female usually lays 4-5 eggs with very pale bluish-green, or greenish azure colour. Both sexes, but predominantly the female, incubate the eggs for 12-13 days. Both adults care for young and feed on terrestrial invertebrates such as grasshoppers, crickets, beetles and their larvae. The young fledge at 21-22 days after hatching. The young remain in own family and migrate together, forming flocks of 6-62 individuals foraging on the ground. On migration, they occur in open steppe, forest edges, open habitats near woodland, and river valleys with old deciduous and mixed forest. In Mongolia, migrating flocks forage insects and their larvae, searching under droppings and dung of cows, horses, and camels on the ground. On migration, they also occur in wheat fields and soft ground areas such as meadow, river banks etc. In the non-breeding season, migrants rest and roost in trees of lake and river valleys from forest to Gobi Desert. Breeding and migrating birds leave Mongolia for wintering grounds by late August-early September.

Habitat Type: 1. Forest (edges of 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. only on migration); 5. Wetlands (5.1. with deciduous and mixed forest); 8. Desert (8.2., 8.3. only on migration); 11. Artificial – Terrestrial (11.2. only on migration, 11.3., 11.4., 11.5. on migration); 12. Artificial – Aquatic (12.2., 12.6. on feeding and migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected both breeding habitats and species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /logging, particularly of trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting -3.5. Cultural and leisure activities-3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed for display in public service places/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison both adults and young/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1.

Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010), and Eurasian Sparrow Hawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites have been destroying breeding habitats and disturbing this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

357. Scientific Name: *Zoothera sibirica*

Species Authority: (Pallas, 1776)

Common Names: Siberian Thrush (English), Shiver hööndii (Mongolian)

Subspecies in Mongolia: *Z. s. sibirica* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Turdus sibiricus* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

Taxonomical Notes: This species was previously included in genus *Turdus*. However, most recent taxonomical reviews by Howard & Moore (1994), del Hoyo *et al.* (2005) and BirdLife International (2011) place this species in *Zoothera* genus. The Mongolian name of the species has changed from "Shiver hööndei" to "Shiver hööndii".

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Ireland; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Sweden; Poland; Malta; Hungary; Russian Federation; India; China; Nepal; Mongolia; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Singapore; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests on low parts of trees in coniferous and mixed forest in Zelter River valley, Selenge province and northernmost Hövsgöl Lake (Bold *et al.*, 2005; Gombobaatar, 2012). It migrates through the breeding areas, river valleys with forest and open areas with tall bushes and

scrub in the Gobi-Altai Mountain Range, Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges, Orkhon-Selenge River basins, Herlen-Ulz River basins, Mongol Daguur Steppe and Middle Khalkh Steppe, Valley of the Lakes, Gobi-Altai mountains and mountains in Gobi Desert (Northern and N Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Busching, 2007).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in the country by late April-early May. Breeding begins in late May to early June depending on weather conditions. Breeding ecology is poorly known in the country. Breeding habitats are broadleaf deciduous and mixed forest with dense undergrowth and shrubs in Northern Mongolia. According to del Hoyo *et al.* (2005), nest is a cup of small twigs and bark, lined with moss, leaves, rootlets bound with some mud, placed above 1 m from ground, rarely higher than 4-5 m in small tree, or crotch of shrub in undergrowth. Female lays 4-5 (3-4 in Japan) eggs of bluish colour with brown spotting. Incubation is 11 days. No information is available on nesting period. They eat chiefly worms and fruits. In Mongolia, individuals occur in areas with deciduous and mixed trees, dense and scattered bushes, tall plants and rocky slopes with shrubs and bushes from taiga forest to steppe including river valleys and rocky mountain slopes. Migrating individuals are seen in gardens and planted trees in towns and cities, and Gobi Desert. Migrating and breeding birds leave the country for wintering grounds by late August-early September. Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (near 5.1., 5.3., 5.5., 5.13. on migration and feeding); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision / it is a potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

358. Scientific Name: *Zoothera dauma*

Species Authority: (Latham, 1790)

Common Names: Scaly Thrush, White's Thrush, Golden Thrush or Golden-spangled Mountain-thrush (English), Alag hööndii, alag hööndei (Mongolian)

Subspecies in Mongolia: *Z. d. aurea* (see Howard & Moore (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2005) for further details)

Synonyms: *Turdus dauma* (Latham, 1790)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Republic of Korea; Iceland; Ireland; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Austria; Sweden; Slovenia; Poland; Montenegro; Serbia; Romania; Finland; Russian Federation; Kazakhstan; Oman; Pakistan; India; China; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Taiwan; Philippines; Japan.

Regional Distribution: This species breeds at N Uvs Lake, Torkholig River (Northern Uvs Depression) and northern Hövsgöl Lake (Hövsgöl Mountain Range). It migrates through the breeding areas, mountain slopes with rocks and bushes, river valleys with bushes and tall grass in open dry steppe, cattle shelters and buildings at settlements in Khangai, Hövsgöl and Hentii Mountain Ranges, Herlen-Ulz River basins and open dry habitats with bushes, trees and tall cover in Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region; oases and mountain slopes with bushes in Gobi (Dzungar, Trans-Altai, Alashani and SW Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown. In Europe, the breeding population is estimated to number 25,000-100,000 breeding pairs, equating to 75,000-300,000 individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating individuals arrive in their breeding and summering sites by late April-early May. Breeding begins in late May-early June. Breeding habitats are dark coniferous and mixed forests in taiga forest, forest steppe and dense river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). Breeding pairs nest 1-6 m up in a tree fork or in tall bushes. The nest is a large cup of twigs, moss, grasses and roots lined with finer grasses and stems. Female lays 3-5 eggs of glossy bright salmon colour with slight dark markings. Both parents feed on invertebrates, including worms, insects and their larvae, small caterpillars, grasshoppers, beetles and small snails. On migration, they forage for invertebrates and fruits on the ground or in trees. On migration, individuals occur singly or occasionally join with other migratory thrushes in almost all habitats from taiga forest and Gobi Desert. Most breeding and migrating individuals leave their summering and breeding site for wintering grounds by late August-early September. Late migrants occur in the country late September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (near 5.1., 5.3., 5.5., 5.13. on migration and feeding); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision / it is a potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006), Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

359. Scientific Name: *Turdus merula*

Species Authority: Linnaeus, 1758

Common Names: Eurasian Blackbird, Common Blackbird or Blackbird (English), Khar hööndei (Mongolian)

Subspecies in Mongolia: *T. m. intermedia* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Iceland; Western Sahara; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Lao People's Democratic Republic; Viet Nam; Hong Kong. It is regionally extinct in Saint Helena and has been introduced to Canada; United States; Greenland; Svalbard and Jan Mayen; Bahrain; Qatar; United Arab Emirates; Myanmar; Thailand; Cambodia; Australia; Taiwan, Republic of Korea; Japan and New Zealand.

Regional Distribution: This species has been recorded at Davaany Zörlög, 10 km west of Ulaanbaatar on 10 September, 1989 (Busching, 2007). A female bird was discovered by S. Gantugs (Khovd University) and photographed by A.Bräunlich in front of the main university building at Khovd town of Khovd province on 9 May, 2007 (S.Gantugs pers. comm. and photographs). It possibly migrates through southern Hentii and Khangai Mountain Ranges (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 150,000,000 - 500,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. There are two documented records in Mongolia. The first record was based on feathers found in the area. The later record was proved by photographs. The species occurs in forested areas, gardens in towns and cities, and lake and river valleys with young deciduous and mixed trees, bushes and shrubs. This subspecies breeds in Kazakhstan in the Karatau, the Tien Shan, east to the Altai (Wassink & Oreel 2007) and most likely reaches the Russian part of the Altai (Koblik *et al.*, 2006). It is omnivorous, feeding on a wide range of insects, earthworms, seeds and berries. It forages mainly on the ground, running and hopping with a start-stop-start progress. It pulls earthworms from the soil, usually finding them by sight, but sometimes by hearing, and roots through leaf litter for other invertebrates. Small vertebrates such as frogs, tadpoles and lizards are occasionally hunted. This species will also perch in bushes to take berries and collect caterpillars and other active insects (Snow, 1958 & 1987).

Habitat Type: Potential habitats are 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.7. Fires;
4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species. However, it migrates through some protected areas and possibly Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

360. Scientific Name: *Turdus obscurus*

Species Authority: Gmelin, 1789

Common Names: Eye-browed Thrush, Eye-browed Thrush Eye-browed Dark Thrush, Dark-headed Thrush, Grey-headed Thrush or White-browed Thrush (English), Khaliun hōöndei (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Russian Federation; India; China; Sri Lanka; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan. It is considered vagrant in Portugal; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Italy; Sweden; Czech Republic; Poland; Malta; Hungary; Finland; Cyprus; United Arab Emirates; Oman; Maldives; Palau.

Regional Distribution: This species nests in low willow and other dense fruit trees in deciduous and mixed forest in mountain taiga and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) in Khangai, Eg River, Darkhad Depression east to Khantai and Buteel mountains (Hövsgöl Mountain Range) through the main mountain massif, south to Bogd Khaan Mountain and east to upper Onon and Balj River (Hentii Mountain Range). It migrates through the breeding areas, forest and river valleys with fruit trees in Northern Uvs Depression, south to Great Lakes Depression, and open dry habitats with bushes and river valleys in Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Baruunkhurai Depression; oases and open areas with bushes and trees in Trans-Altai, Alashani and SW of Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Busching, 2007).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating individuals arrive in breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding habitats are moist spruce forest with rivers and streams, birch forest with underbrush, mixed forest with bushes and shrubs. Breeding pairs nest in a fork of a small tree. The nest is a cup of grasses, rootlets, and twigs with some mud admixed, lined with fine grass. Female lays 4-6 eggs of pale blue colour with reddish-brown markings. Duration of incubation and fledging is unknown. Both adults feed young on insects, spiders, snails, and fruits. They forage on the ground and in trees. On migration, they occur singly or in small loose groups of 3-7 individuals in areas with deciduous and mixed trees, tall bushes, shrubs, rocks and thickets from taiga forest to Gobi Desert, among planted trees and buildings including cattle shelters, abandoned buildings, etc. Most breeding and migrating individuals leave the country for wintering grounds by late August-late

September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (near 5.1., 5.3., 5.5., 5.13. on migration and feeding); 6. Rocky areas (only on migration); 8. Desert (8.2., 8.3. only on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects/, 4.2. Collision-4.2.1. Pylon and building collision / collided birds were occasionally found underneath 15 KV power line that is one of the significant threats to the species (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought / due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006), Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

361. Scientific Name: *Turdus pallidus*

Species Authority: Gmelin, 1789

Common Names: Pale Thrush (English), Bugeen hõöndei (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; China; Mongolia; Hong Kong; Taiwan; Philippines; Japan. It is considered vagrant in Germany.

Regional Distribution: This species nests in deciduous, coniferous and mixed forest in mountain taiga and river valleys in taiga forest areas in the Khangai and Hentii Mountain Ranges. It migrates through the breeding areas and Gurvansaikhan Mountain range of Ömnögobi province (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding begins in late May-early June. Breeding habitats are pine and deciduous forest with thickets and secondary vegetation. Breeding ecology is poorly studied in Mongolia. According to del Hoyo *et al.* (2005), breeding pairs nest in small trees and tall bushes near streams. The nest is a cup of grasses, dry pine needles, stalks, rootlets, and mud. Female lays 4-6 eggs of greenish colour with reddish-brown spots and markings. The eggs are incubated by the female for 13-14 days. Fledging period is 13-15 days. Both parents care for and feed young on beetles, and spiders and larvae. They also eat fruits. It forages on the ground or in trees and bushes for fruits. On migration, individuals occur singly or in small groups of other migratory thrushes. They leave the breeding site for wintering grounds by late August -late September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration);

5. Wetlands (near 5.1., 5.3., 5.5., 5.13. on migration and feeding); 6. Rocky areas (only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

362. Scientific Name: *Turdus ruficollis*

Species Authority: Pallas, 1776

Common Names: Red-throated Thrush, Dark-throated Thrush (English), Ulaanguyeet hööndei or ulaan gyeet hööndei (Mongolian)

Subspecies: *T.r.ruficollis*, *T.r.atrogularis* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Taxonomical Notes: *Turdus ruficollis atrogularis* Jarocki, 1819 (Black-throated Thrush or Dark-throated Thrush in English, Kharguyeet hööndei or khar gyeet hööndei in Mongolian) is a subspecies of Red-throated Thrush (Dawaa *et al.*, 1994; Clement *et al.*, 2000; Clements, 2007&2010; Arlott, 2007; Sibley & Monroe, 1990 & 1993; BirdLife International, 2010&2011). However, this has been considered a separate species in various references (Bold&Fomin, 1991; Reading *et al.*, 1994; Stepanyan, 2003; Bold *et al.*, 2005; Gavrilov&Gavrilov, 2005; Bold *et al.*, 2007; Gombobaatar, 2009; Brazil, 2009; British Ornithologists' Union Records Committee, 2009; Gill & Donsker, 2010). We have followed the taxonomy of BirdLife International (2011).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Portugal; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Austria; Sweden; Czech Republic; Poland; Greece; Finland; Latvia; Bulgaria; Egypt; Russian Federation; Israel; Saudi Arabia; Iraq; Yemen; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Republic of Korea; Japan.

Regional Distribution: This species nests at Kharkhiraa, Turgen and Jargalant Khaikhan Mountains (Mongol-Altai Mountain Range); Tes and Torkholig Rivers (Great Lakes Depression); all suitable habitats in Khangai, Hövsgöl and Hentii Mountain Ranges (except for Southern Khangai Plateau); Orkhon-Selenge River basins; upper Herlen-Ulz River basins, Khalkh River and Ih Khyangan Mountain. It migrates through the breeding areas, forested areas with thickets and river valleys with fruit trees in Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, Southern Khangai Plateau, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression and dry open areas with bushes and trees in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Busching, 2007; Boldbaatar, 2008).

Distribution of Black-throated thrush (*Tr.atrogularis*).

Global Distribution: Portugal; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Austria; Sweden; Czech Republic; Poland; Greece; Finland; Latvia; Bulgaria; Egypt; Russian Federation; Israel; Saudi Arabia; Iraq; Yemen; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Uzbekistan; Afghanistan; Tajikistan;

Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Republic of Korea; Japan.

Regional Distribution: In Mongolia, this species is found in woodland with deciduous forest in river valleys in the Mongol-Altai main range to upper Khovd and Yolt Rivers; from Ölgii town to Achit Lake valley and Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); northern Uvs Lake and lower Torkholig River valley (Great Lakes Depression); Khangai Mountain Range to northern Hövsgöl Lake (Hövsgöl Mountain Range) during the breeding season. It migrates through dry open habitats with bushes and trees and river valleys with fruit trees in the above-mentioned areas and Mongol-Altai Mountain Range, Great Lakes Depression, Southern Khangai Plateau, Khan Höhii range, Ulz River valley, Mongol Daguur Steppe, Valley of the Lakes, Baruunkhurai Depression and mountains in Gobi Desert (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). Approximately 8.9% of the species' range in Mongolia occurs within protected areas.

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, Red-throated Thrush is a breeding visitor, passage migrant and wintering species. Breeding and migrating individuals arrive in Mongolia by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding habitats are mature coniferous, mixed and deciduous forest in high mountains, mountain taiga, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs nest in a tree, on log or stump, or on the ground. The nest is a cup of grass, moss and thin twigs, lined with a cup of mud and inner lining of fine grass. Female lays 5-6, sometimes 4-7 eggs of glossy pale blue colour with reddish-brown sparse markings. The markings sometimes are denser at the larger end. The eggs are incubated by the female alone for 11-12 days. Young birds leave the nest at 10-13 days. Both parents care for and feed chicks on insects like beetles and their larvae, and earthworms. They also eat fruits in non-breeding and late breeding seasons. On migration, they occur singly or in small loose groups of 3-6 individuals joined with Naumann's Thrush and other thrushes. It is found in areas with trees, bushes, rocks and tall plants, planted trees in towns and cities, and man-made constructions such as cattle shelters, abandoned buildings, railway cabins, and railway sidings on migration. Wintering birds are often seen in areas with frozen fruits like Sea Buckthorn, and berries along large river valleys of Tuul, Onon, Balj, Selenge, Khovd, Bóhmórn, Bulgan and Khalkh. Number of wintering birds heavily depends on snow cover and air temperature in Mongolia. Migrating individuals leave the country for wintering grounds by late August-late September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (near 5.1., 5.3., 5.5., 5.13. on migration and feeding); 6. Rocky areas (only on migration); 8. Desert (8.2., 8.3. only on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration); 12. Artificial – Aquatic (12.2., 12.6. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects/, 4.2. Collision-4.2.1. Pylon and building collision / collided birds were occasionally found underneath 15 KV power line that is one of the significant threats to the species (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and

species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006), Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

363. Scientific Name: *Turdus naumanni*

Species Authority: Temminck, 1820

Common Names: Naumann's Thrush, Rufous-tailed thrush or red-tailed thrush (English), Naumanny hööndei (Mongolian)

Subspecies: *T.n.naumanni*, *T.n.oenomus* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Taxonomical Notes: *T. n. oenomus* Temminck, 1831 (Dusky Thrush in English, Huren hööndei in Mongolian) is a subspecies of Naumann's Thrush (Dawaa *et al.*, 1994; Clements, 2007&2010; Arlott, 2007; Sibley & Monroe, 1990 & 1993; BirdLife International, 2010&2011). However, this has been considered a separate species in various references (Bold&Fomin, 1991; Reading *et al.*, 1994; Stepanyan, 2003; Bold *et al.*, 2005; Gavrillov&Gavrillov, 2005; Bold *et al.*, 2007; Gombobaatar, 2009; Brazil, 2009; British Ornithologists' Union Records Committee, 2009; Gill & Donsker, 2010; Tseveenmyadag *et al.*, 2011).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; United States; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Austria; Czech Republic; Slovenia; Poland; Croatia; Hungary; Montenegro; Serbia; Finland; Russian Federation; Cyprus; Israel; Saudi Arabia; Kazakhstan; Kuwait; United Arab Emirates; Oman; Pakistan; India; China; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Thailand; Viet Nam; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan; Northern Mariana Islands.

Regional Distribution: This species builds its nest on low branches of trees in deciduous and conifer-

ous forest with thickets in Zelter River valley in Selenge province. It migrates through various types of woods and thickets, lake and river valleys with fruit trees (Bold *et al.*, 2005; Gombobaatar, 2012) in Northern Uvs Depression, Great Lakes Depression, Khangai Mountain Range, Hövsgöl Mountain Range including Darkhad Depression, Orkhon-Selenge River basins, Hentii Mountain Range (Tuul, Terelj, Onon, and Balj River valleys), Herlen-Ulz River basins; and open habitats with bushes and mountain slopes in Middle Khalkh Steppe and Mongol Daguur Steppe, Buir Lake-Khalkh River-Khyangan region, Gobi-Altai Mountain Range, mountains of Valley of the Lakes and Gobi Desert (Trans-Altai, Alashani and S Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Busching, 2007).

Distribution of Dusky thrush (*Turdus naumanni oenomus*)

Global Distribution: Canada; Pakistan; India; China; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Thailand; Viet Nam; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan. It is considered vagrant in United States; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Austria; Czech Republic; Slovenia; Poland; Croatia; Hungary; Montenegro; Serbia; Finland; Russian Federation; Cyprus; Israel; Saudi Arabia; Kazakhstan; Kuwait; United Arab Emirates; Oman; Northern Mariana Islands.

Regional Distribution: This species possibly nests in coniferous, deciduous and mixed forest with tall bushes and thickets in mountain taiga forest, and river valleys in taiga forest in Khangai and Hentii Mountain Ranges. Breeding has not been documented in the country. It migrates through forest in forest steppe and river valleys in Khangai and Hentii (Tuul, Terelj, Onon, Balj, and upper Herlen Rivers) mountain ranges, lower Herlen-Ulz River basins, and open dry habitats with bush and tall grass in Middle Khalkh Steppe and Mongol Daguur Steppe, Valley of the Lakes, Gobi-Altai Mountain Range; oases and mountain slopes with tall bushes in Gobi (Trans-Altai, Alashani and Eastern Gobi) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Busching, 2007). Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, Naumman's Thrush is a breeding visitor, and passage migrant. Most breeding and migrating birds arrive in Mongolia by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding habitats are deciduous forest (willow, poplar, birch), sparse mixed forest (Siberian Larch and pine) with shrubs, thickets, and bushes in taiga forest, forest steppe, and river valleys. Breeding ecology has been poorly studied. Breeding pair builds the nest in a tree, placed up to 4-5 m but often less than 1 m above the ground. The nest is a crude cup of various grasses, twigs and moss mixed with mud and lined with softer grasses. Female lays 4-6 eggs of greenish-blue, or pale greenish-blue colour with reddish-brown or dark brown streaks, spots and markings. Duration of incubation and fledging is unknown in Mongolia. Both parents feed their young on insects including beetles, ants and their larvae, earthworms, spiders and other terrestrial invertebrates. On migration, they forage insects and their larvae, fruits and seeds of various plants such as berries, Sea Buckthorn on the ground and in the trees. They occur singly or in small loose groups of 4-9 individuals, sometimes joined with other migratory thrushes like Red-throated Thrush in areas with trees, tall bushes and grasses from taiga forest to Gobi Desert. Most breeding birds and migrants leave the country for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (near 5.1., 5.3., 5.5., 5.13. on migration and feeding); 6. Rocky areas (only on migration); 8. Desert (8.2., 8.3. only on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential

threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn their breeding habitats and nests with eggs and occasionally young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006), Eurasian Hobby and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

364. Scientific Name: *Turdus pilaris*

Species Authority: Linnaeus, 1758

Common Names: Fieldfare or Fieldfare Thrush (English), Duulgat hööndei (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Greenland; Iceland; Ireland; Portugal; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Uzbekistan; Tajikistan; Kyrgyzstan; China. It is considered vagrant in Canada; United States; Saint Pierre and Miquelon; Morocco; Algeria; Faroe Islands; Gibraltar;

Tunisia; Svalbard and Jan Mayen; Bahrain; United Arab Emirates; Afghanistan; Mongolia; Japan.

Regional Distribution: This species breeds in lower Khovd and Torkholig Rivers, northern Uvs Lake, and Tes River (Northern Uvs Depression); lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins). It migrates through the breeding areas, forests with fruit trees in mountain steppe, river valleys and planted trees in Great Lakes Depression, Gobi-Altai Mountain Range, upper Tuul, Terelj, rivers (Hentii Mountain Range), oases and mountain valleys with bushes in Gobi (Dzungar, Trans-Altai, Alashani, and W Eastern Gobi). It winters in forest with fruit trees in forest steppe, river valleys and planted trees in towns and villages such as Ulaanbaatar, Ulaangom, Selenge and Khovd (Tugarinov, 1916; Piechocki *et al.*, 1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population consists of 45,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. It is a wintering species. Breeding and passage migrants arrive in the country by late April-early May. Breeding begins in late May to early June, depending on food availability and weather conditions. Breeding habitats are edges of a variety of forest types with thickets and bushes in forest mountain, forest steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). Breeding pairs nest in a fairly open site, in a fork in a tree or among twigs, or on a post or stump, or on the ground. They nest usually in groups, often in a number of adjacent trees with several to a tree. Female builds the nest that is a bulky cup of grass, moss, twigs and roots, lined with a layer of mud forming a cup, lined in turn with fine grass. The female usually lays 5-6, sometimes 3-8 eggs of glossy light blue colour with reddish-brown markings. The markings are often very small and profuse, covering much of the shell and partly obliterating ground colour, sometimes markings sparse, or with heavier blotching, more sparingly distributed and at times capping the larger end. The female incubates the eggs alone for 11-14 days. Both sexes feed young on earthworms, snails, millipedes, spiders, beetles, ants, caterpillars, flies, bugs and their larvae for 12-16 days in the nest. In the non-breeding season, they forage these invertebrates and seeds and fruits of various plants such as Sea Buckthorn, all types of berries in Mongolia. Individuals occur singly or in small loose groups joined with other thrushes in the country on migration and in wintering. Wintering individuals move down to gardens in cities and towns and valleys with fruit trees along large rivers such as Tuul, Terelj, Onon, Balj, Orkhon Selenge, Khovd and Buyant. Breeding individuals and passage migrants leave the country for wintering grounds by early September –late September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (near 5.1., 5.3., 5.5., 5.13. on migration and feeding); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn their breeding habitats and nests with eggs and occasionally young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been

intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006), Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 16.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

365. Scientific Name: *Turdus iliacus*

Species Authority: Linnaeus, 1766

Common Names: Redwing (English), Tsagaanhömsögt hööndei or tsagaan hömsögt hööndei (Mongolian)

Subspecies in Mongolia: *T. i. iliacus* (see del Hoyo *et al.* (2005) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; United States; Greenland; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Lebanon; Syrian Arab Republic; Iraq; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Uzbekistan; Afghanistan; Kyrgyzstan; Mongolia. It is considered vagrant in Libyan Arab Jamahiriya; Jordan; Bahrain; United Arab Emirates; Japan.

Regional Distribution: This species has been recorded in coniferous and mixed forest in Darkhad Depression and N Hövsgöl Mountain Range (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a). D.Sumiya and S.Gombobaatar collected two birds in Caragana steppe at Bayantsagaan sum of Töv province and near Choir sum of Gobisumber province in 21 May, 2001 (S.Gombobaatar & D.Sumiya pers. comm. and NUM bird collection). It migrates through the breeding areas. No records exist outside the breeding areas.

Population: The global population consists of 65,000,000 - 130,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it is most likely breeding visitor. However, breeding record has not

been confirmed in Mongolia. The species arrives in the country by late April-early May. Breeding season possibly begins by late May to early June in Darkhad and N Hövsgöl Mountain Range. Breeding habitats are conifer and mixed forest with shrubs, bushes and undergrowth. According to del Hoyo *et al.* (2005), it nests in shrubs or on the ground, laying 4-6 eggs in a neat nest. The eggs are typically 2.6 x 1.9 cm in size and weigh 4.6 g, of which 5% is shell, and hatch after 12–13 days. The chicks fledge at 12–15 days, but the young remain dependent on their parents for a further 14 days. They feed on a wide range of insects and earthworms all year, supplemented by berries in autumn and winter. Most migrating and presumed breeding birds migrate through open areas with bushes, tall plants, and scattered trees in forest steppe and steppe, joining with Naumann's and Red-throated Thrushes in Mongolia. They occur singly or in small loose groups of 3-6 individuals by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

366. Scientific Name: *Turdus philomelos*

Species Authority: Brehm, 1831

Common Names: Song Thrush (English), Duuch hööndei (Mongolian)

Subspecies in Mongolia: *T. p. nataliae* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Senegal; Mauritania; Morocco; Mali; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Ethiopia; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; Arab Emirates; Oman; Uzbekistan; Kyrgyzstan; Mongolia; Japan. It has been introduced to Australia and New Zealand.

Regional Distribution: This species nests in coniferous and mixed forest in Tes River valley (from Bayantes sum to lower Tes River) and Torkhilog River (Northern Uvs Depression). It migrates across the breeding area, river valleys with tall bushes and fruit trees in Great Lakes Depression, Khangai Mountain Range (upper Orkhon, Ider, Khanui, and Chuluut River valleys) and southern Hövsgöl Mountain Range (Eg and Delgermörön River valleys) (Fomin & Bold, 1991; Bold *et al.*, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a).

Population: The global population consists of 80,000,000 - 200,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding begins in late May-early June. Breeding habitats are coniferous forest, towards the edges, also woodland edges with shrubby cover, and thick hedgerows. Female builds own nest in scrub, usually close to the trunk and 1.2-1.8 m up, or in a hollow in creeper, or rarely on fallen branches or on the ground, usually in a shady, well-hidden site. The nest is a well-shaped cup of grass, thin twigs, roots, moss, dead leaves and lichen, with a neat smooth inner cup of rotten wood pulp or mud. The female usually lays 4-6, sometimes 3-9 eggs of slightly glossy bright, light blue colour with dark or dark purplish brown speckles, spots, or with a few small irregular blotches. Eggs are incubated at daily intervals by the female for 11-15 days (Harris, 1975). Both sexes feed young on grasshoppers, ants, spiders, mites, snails, earthworms, bugs, and their larvae in the nest for 12-16 days. They forage fruits and seeds of various plants such as strawberry, Sea Buckthorn, juniper etc. Individuals migrate singly or in small groups in areas with coniferous and deciduous trees, bushes, scrub, and other tall plants in forest steppe and mountains joining with other migratory thrushes. Breeding and migrating individuals leave the country for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism

/construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 6.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Turdidae

367. Scientific Name: *Turdus viscivorus*

Species Authority: Linnaeus, 1758

Common Names: Mistle Thrush (English), Bujmag hööndei (Mongolian)

Subspecies in Mongolia: *T. v. bonapartei* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Turdus pseudohodgsoni* Kleinschmidt, 1909

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, overgrazing by livestock, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia. It is considered vagrant in Iceland; Faroe Islands; Saudi Arabia; Bahrain; Qatar; United Arab Emirates; Kuwait; Oman; Japan.

Regional Distribution: This species nests in open woodlands in mountain taiga forest, forest steppe and valleys of upper Khovd River to upper Bulgan River, western Mönh Khairkhan Mountain, Uliastai and Khujirt rivers (Mongol-Altai Mountain Range, Baruunkhurai). It migrates through the breeding areas, a variety of woodlands with bushes and scrub, and river valleys with bushes in Mongol-Altai, Darkhad Depression of Hövsgöl, Khangai Mountain Ranges and Baruunkhurai Depression (Polyakov, 1912, 1982; Piechocki *et al.*, 1982; Sumiya&Skryabin, 1989; Fomin&Bold, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Sumiya, 2006; Busching, 2007).

Population: The global population consists of 10,000,000-50,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding birds arrive in the breeding sites by late April-early May. Breeding begins in late May-early June. Breeding ecology is poorly known in Mongolia. It usually breeds in open areas with large trees, in woodland near clearings and woodland

edges with scattered large trees, or in more open mountain areas. The nest is placed in a fork of tree or shrub, from 1.5 m to 10 m up; exceptionally in low shrubs, or hedgerows. The nest is a bulky cup of grass, plant stems, roots, moss and dead leaves; with earth mixed in and consolidating it; lined with fine grass. The female usually lays 4-5 eggs of glossy pale blue, pale greenish-blue, or tinted pale buff with reddish-brown, reddish-purple or pale purple spots or blotches. The female incubates the eggs alone for 12-15 days. Both parents feed the young on terrestrial invertebrates and their larvae, such as grasshoppers, ants, spiders, mites, snails, earthworms, and bugs for 12-16 days. They can fly at c. 20 days (Harris, 1975). Both adults feed the young after leaving nest. They leave the country for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

368. Scientific Name: *Erithacus rubecula*

Species Authority: (Linnaeus, 1758)

Common Names: European Robin (English), Öрниин зеердомруут (Mongolian)

Subspecies in Mongolia: *E. r. tataricus* (see del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla rubicula* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Iceland; Mauritania; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia;

Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia; Japan.

Regional Distribution: A. Bräunlich found a single bird at Otzon Chuluu at N Khovd town of Khovd province on 15-17 November, 2007. A different bird was photographed at about 4 km to the north of the first sighting on 17 November, 2007 (A. Bräunlich pers. comm. photographs).

Population: The global population consists of 150,000,000 - 350,000,000 mature individuals. Global breeding and resident ranges are estimated at 10,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species is found only in western Mongolia. The records show that late migrants pass through western Mongolia to a wintering area. It inhabits woodlands, gardens, forest edges, parks and even city centres. In autumn and winter, robins will supplement their usual diet of terrestrial invertebrates, such as spiders, worms and insects, with berries and fruit (del Hoyo *et al.*, 2005). In Mongolia, it can probably be found in forested areas and planted trees in/near towns in the west.

Habitat Type: 3. Shrub-land (possibly 3.4. on migration); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3. Extraction- 1.3.1. Mining, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming; 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. The species migrates through protected areas and Important Bird Areas in western Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

369. Scientific Name: *Luscinia sibilans*

Species Authority: (Swinhoe, 1863)

Common Names: Rufous-tailed Robin, Swinhoe's Robin, Red-tailed Robin or Whistling Nightingale (English), Shiignee gurgaldai (Mongolian)

Synonyms: *Larvivora sibilans* (Swinhoe, 1863), *Erithacus sibilans* (Swinhoe, 1863)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; China; Thailand; Lao People's Democratic Republic; Viet Nam; Hong Kong; Democratic People's Republic of Korea; Republic of Korea; Japan. It is considered vagrant in United Kingdom and the Mongolia.

Regional Distribution: A single bird was recorded in deciduous forest with thickets and fallen trees in Khalkh River valley of Dornod province (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000) and Shariin gol of Selenge River basin in Selenge province (Boldbaatar, 2005a).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. It was found in two separate places in the north and east of the country. This species passes eastern and northern Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). According to del Hoyo *et al.* (2005), this species inhabits broadleaf forest with dense undergrowth, fallen trees, and thickets, also low-lying conifer forest with thickets. They eat beetles, ants and spiders and forage mostly on the ground.

Habitat Type: 1. Forest (1.1., 1.4. on migration); 3. Shrub-land (3.3., 3.4. on migration).

Dominant Threats: Potential dominant threats follow;

Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.7. Fires; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. This species most possibly migrates through some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

370. Scientific Name: *Luscinia megarhynchos*

Species Authority: (Brehm, 1831)

Common Names: Common Nightingale, Nightingale, Rufous Nightingale or Western Nightingale (English), Zulbaran gurgaldai (Mongolian)

Subspecies in Mongolia: *L. m. hafizi* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is limited. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Senegal; Western Sahara; Mauritania; Gambia; Guinea; Morocco; Sierra Leone; Mali; Liberia; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Gibraltar; Burkina Faso; France; Ghana; Togo; Andorra; Belgium; Nigeria; Netherlands; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Czech Republic; The

Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Sudan; Ukraine; Bulgaria; Egypt; Turkey; Moldova; Russian Federation; Tanzania; Uganda; Cyprus; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Somalia; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia. It is considered vagrant in Iceland; Cape Verde; Ireland; Faroe Islands; Niger; Norway; Sweden; Finland; Lithuania; Estonia; Djibouti; India.

Regional Distribution: This species nests and migrates in thin deciduous and mixed forest with thickets in Bulgan River valley in Baruunkhurai Depression (Fomin & Bold, 1991; Dawaa *et al.*, 1994). Individuals were collected at Jarantai (46°06'N; 91°00'E) on 2 July, 1964 and Bulgan sum of Khovd province (46°09'N; 91°21'E) on 29 May, 1975 (Busching, 2006).

Population: The global population consists of 15,000,000 - 70,000,000 mature individuals. Global breeding and resident ranges are estimated at 7,590,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding individuals arrive in breeding sites possibly by late April-early May. Breeding begins in late May to early June in the west. Breeding habitats are deciduous woodland with shrubby undergrowth, thickets and thick hedgerows. The breeding pairs nest on the ground or a slightly raised site, in leaf litter and twigs under shrubs, or in lush herbage under a bordering shrubby growth. The nest is a loose, bulky cup of dead grass, lined with fine grass and hair. The female usually lays 4-5, rarely 3-7 eggs of slightly glossy ground colour dull bluish-green, variably washed with a rusty tint and with reddish markings at larger end. The female chiefly incubates the eggs for 13- 14 days. Both parents feed young for 11-12 days in the nest. They forage mainly on a variety of invertebrates, but may also consume berries and seeds in late summer and autumn. They forage within dense cover, often on the ground amongst leaf litter, but will also glean insects from low branches and leaves and drop from a perch onto prey (del Hoyo *et al.*, 2005). They leave the breeding site for wintering grounds by late August-early September in Mongolia.

Habitat Type: 1. Forest (edge of 1.4. on migration); 3. Shrub-land (3.4. on migration); 5. Wetlands (5.1.-5.9. with tall bushes and trees on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration);

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 17.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

371. Scientific Name: *Luscinia calliope*

Species Authority: (Pallas, 1776)

Common Names: Siberian Rubythroat (English), Öngöluurt gurgaldai or Khundan öngöluurt gurgaldai (Mongolian)

Synonyms: *Motacilla calliope* (Pallas, 1776); *Erithacus calliope* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; United States; Iceland; United Kingdom; Germany; Italy; Denmark; Sweden; Finland; Egypt; Russian Federation; Kazakhstan; India; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Brunei Darussalam; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan; Palau.

Regional Distribution: This species breeds at lower Torkholig River and northern Uvs Lake and Tes River (Great Lakes Depression); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake, Eg River and Darkhad Depression (Hövsgöl Mountain Range); upper Selenge River; Hentii Mountain Range; Khalkh, Degee, and Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, open dry steppe with bushes and tall grass, mountain slopes with rocks, river valleys with bushes and tall cover and settlements in Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Valley of the Lakes, Gobi-Altai Mountain Range and Gobi (Trans-Altai, Northern, Alashani, and Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Busching, 2006; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating birds arrive in breeding and summering sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding pairs nest in deciduous and mixed forests with tangled thickets, undergrowth and tall bushes, in scrub at forest edges, or on the ground. The nest is built into a grass tussock or herbage at the base of a bush, occasionally in thick shrub a little above ground, in mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). It is a loosely-built cup of thin stems, grass and fibres, lined with fibres, hair and plant down. The female usually lays 5, sometimes 4-6 eggs of glossy light blue colour with reddish-brown fine speckles and spots. The female incubates the eggs for 14 days. Both parents feed young on terrestrial arthropods, including flies and their larvae, ants, beetles, wasps, spiders, bugs, dragonflies, myriapods and plant materials. They forage on the ground, taking items from hard surfaces or low parts of bushes and reeds. The young leave the nest at 12 days. On migration, individuals occur singly or in small groups of 3-4 in open areas with bushes, tall plants, rocks with shrubs, reed beds, and human

settlement from forest steppe to Gobi Desert. Most breeding and migrating birds leave the country by late August–late September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. -5.9. with tall bushes and trees on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting (hunting/gathering)-3.5. Cultural, scientific and leisure activities -3.5.1. Subsistence use and local trade (several bird species, including this species, are collected and stuffed by people for souvenirs in shops and other public service areas); 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds were frequently found underneath all types of power lines in the steppe during the autumn and spring migration (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought / due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

372. Scientific Name: *Luscinia svecica*

Species Authority: (Linnaeus, 1758)

Common Names: Bluethroat (English), Sondort gurgaldai (Mongolian)

Subspecies in Mongolia: *L. s. saturator*, *L. s. kobdensis* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla svecica* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; United States; Senegal; Mauritania; Morocco; Mali; Portugal; Spain; Algeria; United Kingdom; Gibraltar; Burkina Faso; France; Ghana; Benin; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Ethiopia; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Cambodia; Hong Kong; Japan. It is considered vagrant in Bhutan; Iceland; Gambia; Ireland; Cote d'Ivoire; Faroe Islands; Niger; Liechtenstein; Taiwan; Republic of Korea.

Regional Distribution: This species breeds in the main range of Mongol-Altai, east to Mönh Khairkhan massif (2,700 m asl) and Tavan Bogd Mountain (3,200 m asl) (Mongol-Altai Mountain Range); Zereg Depression, lower Khovd River, through northern Uvs Lake (Torkholig River), Tes River valley (from upper to lower); through Khan Höhii Mountain, east to the main range (up to 2,600 m asl) of Khangai, Hövsgöl and Hentii Mountain Ranges. It migrates through the breeding areas, lake and river valleys with deciduous forests with thickets and open dry steppe in the Gobi-Altai Mountain Range, Great Lakes Depression, Southern Khangai Plateau, Orkhon-Selenge River basins, Hentii Mountain Range, Herlen-Ulz River basins, Buir Lake-Khalkh River-Khyangan region and Gobi (Dzungar, Trans-Altai and Alashani Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Busching, 2006; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 30,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 20,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating birds arrive in breeding and feeding sites by late April-early May. Breeding begins in late May-early June. Breeding pairs nest amongst grasses and scrub on wet ground with overgrown thickets and shrubs near streams, rivers and lakes of deciduous and mixed forests in mountain taiga forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is placed on the ground, usually hidden in a hollow on a slight bank, in a dense bush, or dead vegetation, or at base of a shrub. Its nest is a cup of plant stems, dead grass, and moss, lined with fine grass, hair, and rarely feathers. The female usually lays 5-7 eggs of slightly glossy pale green, bluish-green or blue colour with light reddish-brown speckles, mottles, and often poorly defined rusty tint to some or all of shell. The female incubates the eggs for 14-15 days. Both parents care for and feed young on terrestrial invertebrates, chiefly insects, beetles, flies, caterpillars, bugs, grasshoppers, and their larvae, and other invertebrates including spiders, small snails, earthworms, and very young frogs for 14 days. They forage on the ground or in bushes and trees. Individuals migrate singly or in small groups of 2-3 individuals in areas with bushes, tall plants, shrubs, high rocks and gardens from taiga forest to Gobi Desert in Mongolia. They feed on

insects, other arthropods, seeds and fruits on migration. Breeding and migrating birds leave the country for wintering grounds by late August–mid-September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. -5.9. with tall bushes and trees on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

373. Scientific Name: *Luscinia cyane*

Species Authority: (Pallas, 1776)

Common Names: Siberian Blue Robin, Siberian Bluechat or Blue Groundchat (English), Nomin gurgaldai or nomin zanchit gurgaldai (Mongolian)

Subspecies in Mongolia: *L. c. cyane* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla cyane* (Pallas, 1776), *Erithacus cyane* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Spain; United Kingdom; Russian Federation; Kazakhstan; India; China; Nepal; Mongolia; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Taiwan, Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests in coniferous, deciduous and mixed forests in taiga of Hövsgöl and Hentii Mountain Ranges. It migrates throughout the breeding areas, the valleys of Onon and Balj Rivers (eastern Hentii Mountain Range), Ulz River (Mongol Daguur Steppe), Buir Lake-Khalkh River-Khyangan region; oases and bushy areas in the Gobi (Trans-Altai, Alashani and SW of Eastern Gobi) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). Two adult males were seen at the peak of Baga Bogd Mountain (Bogdyn Terguun Mountain), Bayankhongor province on 26 September, 2010 (B. Gantulga pers. comm. and photographs). A first year bird was photographed at the mouth of the Ih Bogd Mountain of Ömnögoobi province on 10 September, 2010 (S. Gombobaatar pers. comm. and photographs)

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. The species arrives at breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding ecology of the species has not been studied in detail in Mongolia. The nest is a cup of moss, leaves, and dry grasses lined with hair and softer grasses and is placed on steep-sided ground, or tree roots, fallen branches, under tangled shrubs or thick scrub cover in coniferous forest. The female lays 4-6 eggs of sky-blue to bright blue or greenish-blue colour. No information is available on the duration of incubation and fledging. They feed on insects including bugs, beetles, ants, spiders, and their larvae in breeding season and seeds, fruits in the non-breeding season, or on migration. It forages on the ground, or in low undergrowth, both running and hopping around like a small crane (*Porzana*) species. On migration, individuals occur in areas with deciduous and mixed trees, tall and dense bushes, shrubs, and other vegetation in forest, forest steppe, open steppe, lake and river valleys, and planted trees and gardens in towns and cities. Migrating birds observed by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. -5.9. with tall bushes and trees on migration); 6. Rocky areas (on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /Collided birds are very occasionally found underneath all types of power lines in the steppe during the autumn and spring migration (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution-

6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 16.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

374. Scientific Name: *Tarsiger cyanurus*

Species Authority: (Pallas, 1773)

Common Names: Orange-flanked Bush-robin or Red-flanked Bluetail (English), Gurgaldai höhzoot or höhzoot (Mongolian)

Subspecies in Mongolia: *T. c. cyanurus* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla cyanurus* (Pallas, 1773)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; United Kingdom; France; Germany; Denmark; Sweden; Slovenia; Finland; Bulgaria; Estonia; Russian Federation; Israel; Lebanon; Kazakhstan; Afghanistan; Pakistan; India; China; Nepal; Mongolia; Bhutan; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in E Hövsgöl Lake and Eg River (Hövsgöl Mountain Range); Selenge River (Khantai and Buteel mountain ranges) and Hentii Mountain Range (upper Tuul, Terelj, Onon, and Balj River valleys). It migrates through the breeding areas, forested areas, lake and river valleys with trees and dense bushes in Mongol-Altai Mountain Range (river valleys), Great Lakes Depression, Khangai Mountain Range, Orkhon-Selenge River basins, Upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); Herlen-Ulz River basins and dry open habitats in Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991;

Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Busching, 2006; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating individuals arrive in breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding habitats are dense moist conifer forest with under shrubs, but also mountain birchwood with low cover (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is placed in a hollow or small cave in bank, or river-cliff, or in a standing or fallen hollow log, or on the ground between tree-roots, among stones, or in a small depression. The nest is a cup of dead grass, roots and moss, lined with soft grass or pine needles, hair, and wool. The female usually lays 3-5, rarely 7 eggs of slightly glossy white, unmarked or with pale and often faint reddish-brown or purplish speckles, spots, or finely mottled with markings. The female incubates the eggs alone. Both parents care for and feed young on terrestrial invertebrates such as insects (beetles, bugs, caterpillars) and their larvae, and spiders for 15 days in the nest. On migration, they feed on invertebrates and fruits in trees and on the ground. It is found in areas with tall plants, bushes, shrubs, scrub, young deciduous trees, and mixed forest from taiga forest to Gobi Desert in Mongolia. They occur singly or in small loose groups of 3-6 individuals across country. It is one of the common migrants in the country. Most breeding and migrating individuals leave their breeding and migrating sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. -5.9. with tall bushes and trees on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial-Terrestrial (11.3., 11.4., 11.5. on migration); 12. Artificial-Aquatic (12.6., 12.9. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

375. Scientific Name: *Phoenicurus erythronotus*

Species Authority: (Eversmann, 1841)

Common Names: Rufous-backed Redstart, Eversmann's Redstart or Red-backed Redstart (English), Ulbar galsuult or ulbar gal suult (Mongolian)

Synonyms: *Sylvia erythronata* (Eversmann, 1841)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Iraq; Kazakhstan; Afghanistan; Kyrgyzstan; Mongolia.

Regional Distribution: This species nests in mountain coniferous and mixed forest with rocks and bushy undergrowth in mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). It breeds in Siilhem, Kharkhiraa and Turgen Mountains and Mönh Khaikhan massif, through the main mountain range of Mongol-Altai, Khovd River to Yolt River valley and Khasagt Khaikhan Mountain (Mongol-Altai Mountain Range); Khan Höhii, Tarvagatai and Bulnai Mountains including the main range of the region (Khangai Mountain Range); Hövsgöl Mountain Range. Birds have been found in Uvs Lake and lower Torkholig River valley during the breeding season. It migrates through the breeding areas, forested areas and open habitats with bushes in Great Lakes Depression, along Herlen River and Toono Mountain (Middle Khalkh Steppe), Buir Lake-Khalkh River-Khyangan region, Baruunkhurai Depression (Bulgan, Uyench, and Bodonch River valleys) and Gobi (Trans-Altai, Alashani and SW of Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are along mountain streams with boulders, wet mossy cliffs, and steep marshy hillsides at 1,800-2,400 m asl. Breeding pairs nest in rock cliffs, holes in trees, overhanging banks, or in half hollow ends of broken trunks in riverbeds, sometimes under tree roots. The nest is a bulky, deep cup of grasses, moss and rootlets lined with thick roots, stems of plants, animal hairs. Female lays 3-5 eggs of greenish or bluish green colour with reddish-brown or purplish grey spots, speckles, and blotches. Duration of incubation and rearing young is unknown in Mongolia. Both adults feed young on forest terrestrial arthropods, including beetles, spiders, crane-flies and their larvae in the nest. Migrating birds occur singly or in small groups of 3-5 individuals feeding on insects and occasionally berries near forested areas in Mongolia. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (near 5.1., 5.5.); 6. Rocky areas.

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /in summer, overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species;/ 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning;/ 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders;/ 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season;/ 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Eagle-owl, Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons;/ 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species/.

Conservation Measures: Approximately 10.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

376. Scientific Name: *Phoenicurus ochruros*

Species Authority: (Gmelin, 1774)

Common Names: Black Redstart (English), Moilon galsuult or moilon gal suult (Mongolian)

Subspecies in Mongolia: *P. o. phoenicuroides* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2005)

Synonyms: *Motacilla ochruros* (Gmelin, 1774)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Ireland; Portugal; Spain; United Kingdom; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova; Cyprus; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Bahrain;

Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia.

Regional Distribution: This species breeds in Mongol-Altai and Gobi-Altai Mountain Ranges; rocky mountains in the valleys of Uvs, Khar-Uvs Lakes and Khovd, and Tes Rivers (Great Lakes Depression); from the main Khangai range east to Hövsgöl Mountain Range and Selenge River valley (Orkhon-Selenge River basins); mountain areas without dense forest in Hentii Mountain Range; Baruunkhurai Depression and Trans-Altai Gobi. It migrates through the breeding areas, rocky mountains with scattered bushes in Great Lakes Depression, Herlen-Ulz River basins and the Gobi (Trans-Altai, Alashani and SW Eastern Gobi) (Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 25,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and migrating individuals arrive in their summering and breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding habitats are high cliff-faces, rocks and boulders with scattered tall bushes and rarely on rocky slopes and cliffs along forest edges and river valleys in high mountains, desert steppe and mountains in the Gobi at altitudes of 3,000-3,200 m asl. Breeding sites are located near creeks and springs in high mountains (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs nest in a hole in rocks, or walls, cliff crevices, rock cracks in the breeding habitats. The nest is a loosely constructed deep cup of dead grass, moss, roots, bark fibres, wool and hair lined with hair and feathers. The female usually lays 6-7, rarely 4-10 eggs of glossy light blue colour. Both parents care for and feed young on terrestrial arthropods and their larvae for 14-20 days in the nest. They forage on the ground or in trees. On migration, individuals occur singly or in small flocks of 4-8 individuals in open areas with rocks and bushes in high mountains, mountains in steppe and desert steppe. On migration, they forage insects and rarely seeds. Breeding birds and migrants leave their breeding and feeding sites for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (edge of 1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2. on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development- 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Eagle-owl, Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species/.

Conservation Measures: Approximately 13.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

377. Scientific Name: *Phoenicurus phoenicurus*

Species Authority: (Linnaeus, 1758)

Common Names: Common Redstart, Redstart, European Redstart or White-fronted Redstart (English), Egel galsuult or gal suult (Mongolian)

Subspecies in Mongolia: *P. p. phoenicurus* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla phoenicurus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Ireland; Portugal; Spain; United Kingdom; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Zimbabwe; Turkey; Moldova; Lebanon; Syrian Arab Republic; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Bahrain; Turkmenistan; Tajikistan; Mongolia.

Regional Distribution: This species breeds at Khovd River and Achit Lake, the main range of Mongol-Altai to upper Bulgan River, Great Lakes Depression, Khasagt Khairkhan and Khan Taishir Mountains (Mongol-Altai Mountain Range); Uvs Lake and Tes River (from Bayantes sum to mouth) (Great Lakes Depression); Gurvansaikhan Mountain range; from Khan Höhii Mountain (covering Tarvagatai and Bulnai Mountains) across Hövsgöl to Hentii Mountain (Khangai and Hövsgöl Mountain Ranges); Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen Rivers, south to Bogd Khaan Mountain (Hentii Mountain Range). It migrates through the breeding areas, open habitats with trees and bushes in river valleys and forest steppe in Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 30,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding individuals and passage birds are seen in the country by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding pairs nest in deciduous and mixed, sometimes coniferous forest with thickets and dense tall bushes in mountain taiga forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is placed in a hole in a tree-stump, rock, or wall or on a ledge in a building. It is sometimes found on the ground, in hollows

on banks, or among tree- roots; but when in trees may be high up. The nest is a loosely constructed cup of dead grass, moss, roots, bark fibres, wool and hair with a deep cup lined with hair and feathers. The female usually lays 6-7 eggs of glossy light blue colour. Both parents feed young on terrestrial invertebrates such as insects, spiders and other arthropods, and their larvae for 14-20 days in the nest. They catch the prey on the ground or in trees. On migration, they occur singly or in small groups of 6-12 birds, in forested areas at edges of taiga forest, forest steppe, scattered trees and tall bushes in river valleys, and in open areas with bushes from steppe to desert steppe in Mongolia. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. -5.9. with tall bushes and trees on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration);

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

378. Scientific Name: *Phoenicurus auroreus*

Species Authority: (Pallas, 1776)

Common Names: Daurian Redstart (English), Daguur galsuult or höh zarlagat gal suult (Mongolian)

Subspecies in Mongolia: *P. a. auroreus* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla auroreus* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, forest fire, logging, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: China; Mongolia; Democratic People's Republic of Korea; Republic of Korea.

Regional Distribution: In Mongolia this species breeds in Northern Khangai and Hövsgöl Mountain Ranges (Delgermörön River valley) and Darkhad Depression, north and east to the country border; Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers (Hentii Mountain Range); lower Herlen and Ulz Rivers; Khalkh, Degee, and Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, open habitats with rocks and bushes in Gobi-Altai Mountain Range, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake and Khalkh River, Valley of the Lakes, and oases in Trans-Altai and Northern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding species. Breeding and passage migrant individuals arrive in the country by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Nesting habitats are old mixed and coniferous forest in taiga forest, forest steppe, and river valleys at different altitudes. Breeding pairs nest in holes in trees, rocks, walls, or cliffs in deciduous, mixed and rarely in coniferous forest with dense bushes, thickets, boulders, cliffs and old trees in mountain taiga forest, forest steppe, patchy woodland in mountain steppe, river valleys and settlements. They also nest in holes and crevices in buildings, cattle shelters, and other human made substrates in towns or villages (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a cup made of straw, moss and rootlets, lined with softer grass, hair and feathers. Female lays 3-6 eggs with pinkish, whitish, very pale green to pale bluish colour with warm brown spots and speckles. The female incubates the eggs for 16-18 days. Both adults feed young on insects, including grasshoppers, ants, flies, bugs and grass seeds. They forage on the ground and in trees. On migration, they form loose flocks of 6-30 individuals. They occur in almost all habitats from taiga forest to Gobi Desert in Mongolia. Breeding and passage migrating birds leave Mongolia for wintering grounds by late early September-early October, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1. -5.9. with tall bushes and trees on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting (hunting/gathering)-3.5. Cultural, scientific and leisure activities -3.5.1. Subsistence use and local trade (several bird species, including this species, are

collected and stuffed by people for souvenirs in shops and other public service areas); 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

379. Scientific Name: *Phoenicurus erythrogastrus*

Species Authority: (Güldenstädt, 1775)

Common Names: White-winged Redstart or Güldenstädt's Redstart (English), Tseejmeg galsuult or tseejmeg gal suult (Mongolian)

Subspecies in Mongolia: *P. e. grandis* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Phoenicurus erythrogaster* (Güldenstädt, 1775), *Motacilla erythrogastra* (Güldenstädt, 1775)

Taxonomic Note: Gender agreement of species name follows David & Gosselin (2002a).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; Saudi Arabia; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan.

Regional Distribution: In Mongolia this species breeds in Tavan Bogd, Sair, Mönh Khairkhan (3,500 m asl), Kharkhiraa, Turgen, Khasagt Khairkhan (2,600 m asl), Altan Höhii (2,600 m asl), Jargalant Khairkhan

massif (2,400 - 3,500 m asl) (Mongol-Altai Mountain Range and Great Lakes Depression); Ih Bogd and Tost Mountains (2,200 - 3,100 m asl) (Gobi-Altai Mountain Range); Khan –Höhii and Khangai (2,700 m asl) (Khangai Mountain Range), high mountains in Hövsgöl and Hentii Mountain Ranges. Birds are found on mountain slopes with rocks, bushes and thickets in Herlen-Ulz River basins, Buir Lake-Khalkh River-Khyangan region and Gobi (Dzungar, Trans-Altai, Alashani and SW Eastern Gobi) on migration (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Gombobaatar *et al.*, 2007).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder, winter visitor and possibly passage migrant. Breeding begins in late May-early June. Breeding pairs nest in rock ledges, rock crevices, or cliff faces, or on the ground in high alpine terrain with rocky slopes at the tree line near permanent snows at altitudes of 2,900 and 3,000 m asl (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a bulky cup of grasses, plant stems and wool, lined with hair and feathers. The female usually lays 4 eggs of slightly glossy blue, unmarked or with small fine reddish markings mostly at the larger end. The female chiefly incubates the eggs for 12-16 days. Nesting period is 14-16 days. Both adults feed young on terrestrial invertebrates, mostly insects and other arthropods including moths, spiders, beetles, grasshoppers, bugs, flies, ants, earthworms, and larvae. They forage on the ground or in trees. Wintering birds usually gather along river valleys with wild and planted Sea Buckthorn trees in the west. They feed on frozen fruits of Sea Buckthorn trees. They move down to mountain valleys and hillsides of high mountains, sometimes in high rocky mountains in the steppe (altitudinal movement). During seasonal movements, individuals occur singly or in small groups of 3-8 individuals in open mountains. Habitat Type: 3. Shrub-land (3.4. during seasonal movements); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (near 5.1., 5.3., 5.5. with Sea Buckthorn trees During seasonal movements and wintering), 5.11. during seasonal movements); 6. Rocky areas; 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have including directly and indirectly affecting the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species/.

Conservation Measures: Approximately 10.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

380. Scientific Name: *Saxicola insignis*

Species Authority: Gray, 1846

Common Names: White-throated Bushchat or Hodgson's Bushchat (English), Ögöölei shulganaa (Mongolian)

Global Status: Vulnerable, C2a(ii)

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. This species is likely to be upgraded to a threat category in the near future. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; Kazakhstan; India; China; Nepal; Mongolia; Bhutan.

Regional Distribution: This species breeds at Siilhem Mountains (juvenile male collected and probable adult seen on the southern slopes by the upper Sary-Dzhamata (Sary-Dzhamata) River, c.2,500 m, in August 1914 (Sushkin, 1938; BirdLife International, 2001); Höh Serh, Khasagt Khairkhan, Bumbat Khairkhan, and Ulaan Davaa (several pairs and families on the northern slopes at 2,800-3,100 m, two fledged young near the Ulaan Davaa pass at 2,600 m, and one pair in the Borgiin River basin at 2,500 m in July, 1979 (Kishchinskiy *et al.*, 1982; Birdlife International, 2001); Jargalant Khairkhan (one pair with a recently fledged juvenile and another male in July, 1995); the species may be widespread in suitable habitat (which was not surveyed) on Jargalant Khairkhan, Bumbat Khairkhan and in the adjacent Altay (Bräunlich, 1995; BirdLife International, 2001; Nyambayar & Tsevenmyadag, 2009); a pair visiting a nest hidden among boulders at c.2,900 m in a valley (46°49'N; 91°46'E) with nearby peaks exceeding 3,000 and 4,000 m asl was found in Mönh Khairkhan National Park in the Mongolian part of the Altai-Sayan Mountain ecoregion 21 July, 2007. A few hundred m from the breeding pair, a fledged juvenile was observed (Bräunlich & Steudtner, 2008) (Mongol-Altai Mountain Range) (greater than 2,600 m asl); Bodonch River (Bold, 1997; Busching, 2005) and Otgontenger Massif's snow peak in June-July, 1929 (Fomin & Bold, 1991), mountains of the upper Ongi River at Lamyn Gegeen monastery in east Khangai; upper Tui River (one young bird collected near the monastery in July, 1926 (Stresemann & Portenko, 1982) (Khangai Mountain Range) (Bold, 1997); and Ih Bogd, Bayankhongor province (Bold, 1997; S. Gombobaatar pers. comm.). It migrates through the breeding areas, open habitats and river valleys with bushes and tall vegetation in Great Lakes Depression and Chuluut River of Arkhangai province; Khasagt Khairkhan mountain (Gobi-Altai); Ongi River (Valley of the Lakes) (Bold, 1997). This bushchat is reported to occur in western Mongolia, eastern Kazakhstan and in the Russian Altai (del Hoyo *et al.*, 2005). However, the tiny Russian population is possibly extinct (del Hoyo *et al.*, 2005), and with the only Kazakhstan records being a collected specimen of uncertain origin and an undated observation with no description, Wassink & Oreel (2007) omitted the species from the Kazakhstan list. If this is correct, today the only place to see and study this little-known species at its breeding sites is in Mongolia (Bräunlich & Steudtner, 2008).

Population: The global population consists of 2,500-9,999 mature individuals. Global breeding and resident ranges are estimated at 230,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia. It has a small, declining population as a result of loss of its wintering grassland habitats in Northern India and Nepal (Bräunlich & Steudtner, 2008).

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor in the west. They arrive in the breeding sites by early to late May, depending on weather conditions. Breeding season begins by late May - early June. Breeding pairs nest in wet meadows, mountain valleys with rocks near streams, mountain slopes with rocks and boulders and low vegetation in alpine and subalpine meadows in high mountains (Bold, 1987&1997; BirdLife International, 2001; Bräunlich& Steudtner, 2008; Gombobaatar, 2012). Breeding ecology of the species has been poorly studied in Mongolia. According to Bold (1997), the nest is placed on the ground under rocks and stones, and in rock crevices. The species builds a bulky nest with thick walls. The wall is wider at the base than at the top and is composed mainly of dry grass, lined with wool and dry moss. From 3 to 5 pairs nest close to each other in Mongol-Altai and 2-3 pairs in Khangai high mountains (Bold, 1997). The female lays 3-5 eggs of pale greenish-blue, or very pale green-tinged bluish colour with dark brown, reddish-brown markings. The female incubates the eggs alone. Both parents feed chicks before and after fledging (Panov, 1976; BirdLife International, 2001). In the Mongol-Altai, one pair was feeding nestlings on 15–18 July, but apparently independent fledglings were also noted at this time (Kishchinskiy *et al.*, 1982). There are no data on diet and feeding ecology from the breeding grounds. In winter the diet comprises insects (mostly beetles) and their larvae; also some vegetable matter (BirdLife International, 2001). They occur singly or in small groups of 2-6 individuals after the breeding and on migration. They possibly leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. Migration pattern and route are also unknown in Mongolia.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.3., 5.11. on migration and feeding); 6. Rocky areas (in alpine and subalpine meadow near spring and creeks).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought. Habitat loss is the main threat to the species in Nepal, grazing, ploughing and burning being the primary underlying causes (BirdLife International, 2001)/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Red Fox (*Vulpes vulpes*) and Grey Wolf (*Canis lupus*) during the breeding season and Saker Falcon migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species in Mongolia. The restricted grassland south of Kosi barrage lies outside protected areas and is highly disturbed by a large number of local fishermen, cattle-grazing and flood damage, pressures that are thought to have caused the local decline in the species (BirdLife International, 2001)/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Listed as Rare in the Mongolian Red Data Book (1997). Approximately 17.8% of the species' range in Mongolia occurs within protected areas. It is listed in the CMS Appendix II.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

381. Scientific Name: *Saxicola torquatus*

Species Authority: (Linnaeus, 1766)

Common Names: Common Stonechat, Siberian Stonechat, Stonechat or European Stonechat (English), Egel shulganaa or khar erhet shulganaa (Mongolian)

Synonyms: *Saxicola maurus* (Pallas, 1773)

Subspecies in Mongolia: *S. t. maurus* (Cramp&Simmons (1977-1994), Dowsett &Forbes-Watson (1993), Sibley & Monroe (1990&1993), BirdLife International (2011) for further details)

Taxonomical Notes: *Saxicola torquatus* has been split into subspecies; *S.t.torquatus*, *S.t.maurus* etc. (Cramp&Simmons, 1977-1994; Dowsett &Forbes-Watson, 1993; Sibley & Monroe, 1990, 1993). According to most recent publications abroad (Wiittmann *et al.*, 1995; Zink *et al.*, 2009; Brazil, 2009) and in Mongolia (Gombobaatar, 2009; Tseveenmyadag *et al.*, 2010), *Saxicola maurus* is a separate species. However, the Taxonomy Working Group of BirdLife International (2011) considers *Saxicola torquatus* to consist of three different subspecies, including *S.t.maurus*. The taxonomy of *Saxicola maurus* is still under review by the Working Group.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; United States; Iceland; Senegal; Mauritania; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Gibraltar; France; Niger; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Gabon; Liechtenstein; Libyan Arab Jamahiriya; Equatorial Guinea; Austria; Congo; Sweden; Angola; Namibia; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; South Africa; Hungary; Slovakia; Montenegro; Serbia; Albania; Botswana; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Sudan; Zambia; Ukraine; Bulgaria; Estonia; Egypt; Zimbabwe; Turkey; Moldova; Russian Federation; Rwanda; Burundi; Tanzania; Uganda; Mozambique; Swaziland; Cyprus; Malawi; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Comoros; Madagascar; Mayotte; Armenia; Islamic Republic of Iran; Azerbaijan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Taiwan; Democratic People's Republic of Korea; Republic of Korea.

Regional Distribution: This species breeds at Khovd River, Achit Lake, Siilhem, Kharkhiraa and Turgen Mountains; from Altai Tavan Bogd to Bulgan River, Mönh Khaikhan massif and Khasagt Khaikhan Mountains (Mongol-Altai Mountain Range); northern Uvs Lake and the delta of Tes Nariin, and Torkholig Rivers (Great Lakes Depression); from Khan Höhii Mountain, east through upper Herlen, Onon, and Balj Rivers; north to the country border and south to W Khangai range; further east to Tuul River valley and Bogd Khaan Mountain (Khangai and Hentii Mountain Range); Hövsgöl Mountain Range; Khalkh and Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, open habitats with bushes and tall grass and dry steppe in Orkhon-Selenge

River basins, lower Minj, Tuul, Terelj, Onon, Balj, Huder, and Bulnai Rivers (Hentii Mountain Range); Herlen-Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain and Baruunkhurai Depression; Gobi-Altai Mountain Range and Valley of the Lakes (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 25,000,000 - 300,000,000 mature individuals. Global breeding and resident ranges are estimated at 32,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and a passage migrant. Most summering and breeding individuals arrive in summering and breeding sites by late April-early May, depending on weather conditions. Breeding season begins by late May-early June. Breeding habitats are dry open areas with low scattered shrubby cover in high mountains, meadows at the edges of mountain forest, forest steppe, mountain steppe (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female builds own nest in herbage at the base of a bush, occasionally a little above the ground in dense bush. The nest is a cup of grass, moss, occasionally also plant stems and wool. It is lined with hair, wool and some feathers. The female usually lays 5-6, rarely 3-8 eggs of moderately glossy very pale blue or greenish-blue colour with reddish-brown speckles, spots or very fine mottles. The eggs are incubated by the female alone for 14-15 days; the male rarely assists. Both parents feed young on insects and their larvae for 12-13 days in the nest. Migrating birds pass through almost all habitats in Mongolia, excluding high mountains and dense taiga forest, by late August-early September. On migration, they occur in bushes, tall grasses, and scattered trees as single individuals, or in small flocks of 3-6 individuals, from forest to Gobi Desert.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.9. with tall bushes and trees on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

382. Scientific Name: *Oenanthe oenanthe*

Species Authority: (Linnaeus, 1758)

Common Names: Northern Wheatear, Wheatear or European Wheatear (English), Aduuch chogchigo or aduuch chogchokhoi (Mongolian)

Subspecies in Mongolia: *O. o. oenanthe*, *O. o. libanotica*, (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla oenanthe* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; United States; Mexico; Cuba; Dominica; Aruba; Netherlands Antilles; Puerto Rico; Virgin Islands, U.S; Virgin Islands, British; Anguilla; Saint Kitts and Nevis; Montserrat; Antigua and Barbuda; Guadeloupe; Saint Vincent and the Grenadines; Martinique; Saint Lucia; Barbados; Saint Pierre and Miquelon; Bermuda; Greenland; Iceland; Cape Verde; Senegal; Western Sahara; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Togo; Niger; Benin; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Monaco; Cameroon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; The Democratic Republic of the Congo; San Marino; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Zambia; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Zimbabwe; Turkey; Moldova; Russian Federation; Rwanda; Burundi; Tanzania; Uganda; Cyprus; Malawi; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Mongolia. It is considered vagrant in Cote d'Ivoire; Gabon; Botswana; Comoros; Seychelles; Maldives; Nepal; Malaysia; Philippines; Republic of Korea; Japan.

Regional Distribution: This species breeds in Mongol-Altai Mountain Range, mostly 2,400-3,200 m asl (up to 3,500 m), east to Khasagt Khairkhan, Khan Taishir Mountains, and as far as Aj Bogd Mountains (Mongol-Altai Mountain Range); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range), south to Tost Mountain; from Northern Mongol-Altai Mountain Range through Tes River valley and the mountains surrounding Great Lakes Depression; from Khan Höhii Mountains, east to Onon, Balj, Herlen, and Ulz River valleys, north to the country border, south to Southern Khangai Plateau (Khangai and Hentii Mountain Ranges); Hövsgöl Mountain Range (except for dense mountain taiga forest); Orkhon-Selenge River basins; Herlen-Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe (fairly scarce); Khalkh and Nömrög Rivers, and Buir Lake, Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region); mountain areas in Valley of the Lakes, Baruunkhurai Depression and Gobi mountains (N&W Eastern Gobi). It migrates through the breeding areas and dry open habitats in the Eastern Mongolian Plain, Trans-Altai, Alashani and Eastern Gobi (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Bold, 2005; Boldbaatar, 2005;

Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 20,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 31,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most of the breeding individuals arrive in the breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding pairs nest in abandoned burrows of small rodents, rock crevices and holes and any gaps of man-made substrates in open, stony habitats with tall vegetation in high mountains, edge of mountain taiga forest, forest steppe and mountain slopes with broken rocks in mountain steppe, desert steppe, open lake and river valleys, and settlements (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The female builds the nest. The nest is a large, loosely-constructed heap of grass, moss, plant stems, and roots. The female usually lays 5-6, rarely 3-8 eggs of a non-glossy pale blue colour, rarely with a few fine dark specks at larger end, or unmarked. The eggs are incubated by both sexes but mainly by the female for 14 days. Both parents care for and feed young on various terrestrial arthropods, their larvae and worms for 14-15 days in the nest. They catch prey on the ground by a short run or low jump. On migration, solitary individuals are found in open habitats with bushes, rocks and forest edges. Most individuals leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4. near forest edges with broken rocks and cliffs); 3. Shrub-land (3.4. near rocks); 4. Grassland (4.4. on migration); 5. Wetlands (5.3., 5.9. only on migration); 6. Rocky areas; 8. Desert (8.2., 8.3. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.); 12. Artificial – Aquatic (12.2., 12.6., 12.9. on migration or feeding near nest site).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision / Collided birds have been found underneath all types of power lines in the steppe during the autumn and spring migration and electrocution by 15 KV power lines is one of the significant threats to the species (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /young birds collide with vehicles after breeding season/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

383. Scientific Name: *Oenanthe pleschanka*

Species Authority: (Lepechin, 1770)

Common Names: Pied Wheatear, Pleschanka's Wheatear or Common Pied Wheatear (English), Myaraan chogchigo or myaraan chogchookhoi (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Ireland; United Kingdom; France; Netherlands; Norway; Luxembourg; Germany; Italy; Denmark; Libyan Arab Jamahiriya; Austria; Sweden; Chad; Poland; Malta; South Africa; Hungary; Serbia; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Sudan; Ukraine; Bulgaria; Egypt; Turkey; Moldova; Russian Federation; Tanzania; Uganda; Cyprus; Ethiopia; Kenya; Republic of Korea; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; Maldives; China; Sri Lanka; Nepal; Mongolia; Hong Kong; Democratic People's Republic of Korea; Japan.

Regional Distribution: This species breeds in Achit Lake valley, through the southern range of the Mongol-Altai to Baruunkhurai Depression (Mongol-Altai Mountain Range), to the eastern Gobi-Altai mountains; all suitable habitats in Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine zone, dense taiga forest, wetlands, river valleys with bushes and trees); Orkhon-Selenge River basins; upper Tuul, Terelj, Onon, Balj, and Herlen Rivers; Middle Khalkh Steppe (Choiryn Bogd, Ih Sansar, Darkhan, Toono Mountains); upper Ulz River ; Buir Lake-Khalkh River-Khyangan region. It migrates through the breeding areas, open habitats with bushes and tall cover, along mountain slopes and open dry steppe in Mongol Daguur Steppe, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression; oases and dry habitats with bushes and trees in Trans-Altai, Northern, Alashani and Eastern Gobi (Kozlova, 1930; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population consists of 500,000 - 1,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia. However, average density of the species was 170 individuals per km² in mountain slopes in the steppe at Darkhan sum, Hentii province in June, 2006 (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008)

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most of the breeding individuals arrive in breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. Breeding pairs nest in a hole or crevice in a bank or rocky outcrop, on rocky ground, and in crevices on mountain slopes with rocks and cliffs, dried river valleys with scattered bushes, rocky mountains with tall bushes in high mountains, on the edge of mountain taiga forest, forest steppe, mountain steppe, desert steppe and Gobi Desert and settlements (Bold *et al.*, 2005; Tseveenmyadag *et*

al., 2010; Gombobaatar, 2012). The nest is a deep to shallow cup of varying construction, of plant stalks and dry grass, lined with similar finer material, leaves, roots, hair and feathers. The female usually lays 4-6 eggs of glossy pale blue or greenish-blue colour with reddish-brown specks, spots or small blotches. According to Gavrillov&Gavrillov (2005), The female incubates the eggs alone for 13 days. Both parents feed young on various terrestrial arthropods and their larvae in the nest. On migration individuals occur singly or in small loose groups of 4-8 in open areas by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (edge of 1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3. on migration, 11.4., 11.5.); 12. Artificial – Aquatic (near 12.2., 12.6. only on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution-6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006), Eurasian Hobby and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

384. Scientific Name: *Oenanthe deserti*

Species Authority: (Temminck, 1825)

Common Names: Desert Wheatear (English), Tsöliin chogchigo or tsöliin chogchookhoi (Mongolian)

Subspecies in Mongolia: *O. d. deserti* (see Howard & Moore (1994); del Hoyo *et al.* (2005) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Senegal; Western Sahara; Mauritania; Morocco; Mali; Ireland; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Niger; Belgium; Nigeria; Netherlands; Norway; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Libyan Arab Jamahiriya; Sweden; Chad; Poland; Malta; Hungary; Greece; Finland; Sudan; Estonia; Egypt; Turkey; Russian Federation; Uganda; Cyprus; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Sri Lanka; Nepal; Mongolia; Bangladesh; Japan. It is regionally extinct in Georgia.

Regional Distribution: This species breeds in Achit Lake valley (Mongol-Altai Mountain Range); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range), south to the country border; all suitable habitats in Great Lakes Depression, north to the state border; south-western Khan Höhii Mountains across to the Southern Khangai Plateau, to Valley of the Lakes, Baruunkhurai Depression and Gobi (Trans-Altai, Northern, Alashani and SW Eastern Gobi). It migrates through open dry habitats with bushes and rocks in the breeding areas (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Busching, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding individuals arrive in breeding sites by late April-early May. Breeding begins in early to mid-June. Breeding pairs nest in crevices, cavities, on the ground underneath rocks and in holes and cracks of man-made substrates, in dry open sandy habitats with scattered bushes, young Saxaul trees, scarce vegetation, and rocks and cliffs with bushes in desert steppe, Gobi Desert, mountain valleys, and herder camps and settlements in lake and river valleys (Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a large, loosely-constructed cup of grasses, plant stems and plant down, lined with similar material, wool, hair and feathers. The female usually lays 4-5, sometimes 3-6 eggs of slightly glossy pale blue colour with reddish-brown markings, often confined mainly to larger end where they may occasionally form a conspicuous wreath. The female incubates the eggs alone. Both adults feed young on terrestrial arthropods and larvae in the nest. After breeding season, families stay together near nesting areas and feeding on insects on the ground. On migration, individuals, pairs, or small groups of 3-6 individuals occur in open areas of the desert steppe and Gobi Desert. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.9. only on migration); 6. Rocky areas; 8. Desert (8.1., 8.2., 8.3.); 11. Artificial - Terrestrial (11.3., 11.4., 11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and

chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Approximately 16.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

385. Scientific Name: *Oenanthe isabellina*

Species Authority: (Temminck, 1829)

Common Names: Isabelline Wheatear or Isabelline chat (English), Bujimch chogchigo or bujimch chogchookhoi (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, forest fire, logging, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Senegal; Mauritania; Morocco; Mali; Algeria; Niger; Nigeria; Italy; Tunisia; Libyan Arab Jamahiriya; The Democratic Republic of the Congo; Chad; Malta; Greece; Romania; the Former Yugoslav Republic of Macedonia; Sudan; Ukraine; Bulgaria; Egypt; Turkey; Russian Federation; Tanzania; Uganda; Cyprus; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; Maldives; China; Mongolia. It is considered vagrant in Gambia; Ireland; Portugal; Spain; United Kingdom; France; Netherlands; Norway; Germany; Switzerland; Denmark; Cameroon; Sweden; Poland; Finland; Zambia; Rwanda; Yemen; Seychelles; Sri Lanka; Nepal; Bhutan; Myanmar; Japan.

Regional Distribution: This species breeds in Khovd River basin (up to 2,200 m asl), Mönh Khairkhan massif, Khasagt Khairkhan and Taishir Mountains (up to 2,600-3,000 m asl) to Sharga Gobi (Mongol-Altai Mountain Range); Ih Bogd and Gurvansaikhan Mountains (up to 2,300 m asl) (Gobi-Altai Mountain Range); Northern Uvs Depression, Tes River valley to Sharga Gobi Depression (Great Lakes Depression); Tamir, Khanui and Orkhon Rivers and Sangiin Dalai, and Ögii Lakes; Tui and Baidrag River valleys (Southern Khangai Plateau); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Mountain Range (except for alpine zones or high altitude areas, mountain taiga forest and wetlands); Okhon-Selenge basins; Tuul, Terelj, Onon, and Balj River valleys (Hentii Mountain Range); Herlen-Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Nömrög, Tsagaan chuluut, Mogoit, Azarga and Galdastai Rivers, and Buir, and Shavar Lakes and Ih Khyangan Mountains (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes

(Valley of the Lakes); Bulgan, Uyench and Bodonch Rivers (Baruunkhurai Depression or Dzungariin Gobi); Northern and Eastern Gobi. It migrates through the breeding areas, open dry habitats and oases in Trans-Altai and Alashani Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 25,000,000 - 400,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia. However, average density of the species was 13 individuals per km² in Caragana steppe, 13 individuals in short vegetated steppe, 9 individuals in mountain steppe, 109 individuals in mountain slopes at Darkhan sum of Hentii province in June, 2006 (Gantulga & Gombobaatar, 2006; Gombobaatar & Gantulga, 2008).

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding species. Most breeding and non-breeding individuals arrive in summering and breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May-early June. It nests in burrows and holes of Long-tailed Ground Squirrel (*Spermophilus undulatus*), Daurian Ground Squirrel (*Spermophilus dauricus*), Mongolian Marmot (*Marmota sibirica*), Daurian Pika (*Ochotona daurica*) and Tolai Hare (*Lepus tolai*) in dry open habitats with short vegetation and scattered low bushes, mountain slopes with small rocks and boulders in high mountains, the edge of taiga mountain forest, forest steppe, mountain steppe (all types of steppe including Caragana steppe), desert steppe, valleys of rivers, lakes and settlements (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a shallow, bulky cup of grass, roots, plant stems, hair and wool, lined with hair and wool. The female usually lays 4-6, sometimes 5-7 eggs of glossy pale blue colour, rarely with a few fine dark specks at larger end, or unmarked. The female incubates the eggs alone. Both sexes feed the young for 12 - 14 days after leaving the nest. The diet of this species consists primarily of small invertebrates, such as ants, beetles, grasshoppers, spiders and larvae. They catch the prey on the ground. They may have a double brood per year, depending on food availability and weather conditions. On migration, they may occur singly, in pairs, or in small groups of 3-8 individuals in open areas. They leave the breeding site for wintering grounds by late August-early September, depending on weather conditions.

Habitat Type: 1. Forest (edge of 1.4. on migration); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4.); 5. Wetlands (5.3.-5.9., 5.13. only on feeding and migration), 6. Rocky areas; 11. Artificial – Terrestrial (11.4., 11.5. on migration); 12. Artificial – Aquatic (12.2., 12.6., 12.9. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining / gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning / chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ 4.2. Vehicle collision /fast driving cars in the steppe hit young birds at midday and midnight/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought / due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*),

Corsac Fox (*Vulpes corsac*), Halys Viper (*Gloydius halys*) prey upon eggs and young chicks in the nests. This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010)/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance-10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

386. Scientific Name: *Monticola saxatilis*

Species Authority: (Linnaeus, 1766)

Common Names: Rufous-tailed Rock-thrush, Rufous-tailed Rock Thrush, Rock Thrush, Mountain Rock Thrush, or Spotted Rock Thrush (English), Khadny jijir or khadny hööndei (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Senegal; Western Sahara; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Gibraltar; France; Ghana; Togo; Niger; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Switzerland; Italy; Tunisia; Denmark; Cameroon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Sudan; Zambia; Ukraine; Bulgaria; Egypt; Turkey; Moldova; Russian Federation; Rwanda; Tanzania; Uganda; Cyprus; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Seychelles; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia; Myanmar; Japan. It is regionally extinct in Germany.

Regional Distribution: This species breeds in Mongol-Altai, east to Achit Lake and Yolt River valleys (Mongol-Altai Mountain Range); rocky mountain slopes in Gobi-Altai Mountain Range and Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest, wetlands, and river valleys with trees and bushes); Orkhon-Selenge River basins; steppe mountains in Eastern Mongolian Plain; Middle Khalkh Steppe and Mongol Daguur Steppe; rocky mountain slopes in Valley of the Lakes, Baruunkhurai Depression and the Northern Gobi. It migrates through the breeding areas, mountain slopes and open habitats in Gobi-Altai Mountain Range and Gobi (Trans-Altai, Alashani

and Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Busching, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 500,000 - 4,000,000 mature individuals. Global breeding and resident ranges are estimated at 8,710,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and summering individuals arrive in summering and breeding sites by late April-early May, depending on weather conditions. Breeding begins in late May - early June. Breeding pairs nest on the ground underneath rocks, in rock crevices, on rocky ground, among ruins, in a shallow cavity covered by grasses in dry, rocky mountain slopes with sparse vegetation and high rocks and cliffs in high mountains, forest steppe, mountain steppe, desert steppe and river valleys in the main ranges (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a neat cup of grass, roots, moss and plant stems, lined with fine grass and roots, and is built by the female. The female usually lays 4-5 eggs of glossy pale blue reddish-brown specks at larger end. The eggs are incubated by the female alone for 14-15 days. Both sexes care for and feed young on terrestrial arthropods and their larvae such as beetles, grasshoppers for 14-16 days in the nest. They catch the prey on the ground. On migration, they feed on invertebrates and berries, traveling singly or in pairs in open areas with rocks and cliffs. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (edge of 1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2. on migration).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Eagle-owl, Saker Falcon (Gombobaatar, 2006), Eurasian Hobby and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species/.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

387. Scientific Name: *Petrophila gularis*

Species Authority: (Swinhoe, 1863)

Common Names: White-throated Rock-thrush or Blue-headed Rock Thrush (English), Tsagaanguyeet dongor or tsagaan guyeet hööndei (Mongolian)

Synonyms: *Monticola gularis* (Swinhoe, 1863)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It has a very small area of occupancy of less than 20,000 km² and the regional population is unknown; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; China; Mongolia; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Hong Kong; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests in open mixed and coniferous mountain forest with undergrowth at middle of Khalkh River of Dornod province. It migrates through breeding areas and rocky scrub in steep-sloping terrain near rivers and streams in the deltas of Khalkh River of Dornod province (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Migration and breeding ecology of the species are poorly described in the country. The species arrives at breeding sites by late April-early May. Breeding season possibly begins by late May-early June. Breeding habitats are open mixed or coniferous forest with thickets and undergrowth, in the east of the country. According to del Hoyo *et al.* (2005), breeding pairs nest on steep-sloping ground, in a hollow amid roots, in fallen trees or stumps, or in a rock cavity. The nest is a bulky cup of dry leaves, twigs, lichen, moss, and rootlets lined with softer stems and grasses. Breeding female lays 4-8 eggs with pinkish or whitish-yellow colour with rusty-brown spots. Both adults care for and feed young on invertebrates including insects such as beetles, lepidoptera, spiders and wasp larvae. They forage on the ground or in small trees. Breeding individuals possibly leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas.

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.7. Fires /forest and steppe fires may burn habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic / domestic land pollution caused by mining and industrial activities is a cause of habitat degradation

and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Eagle-owl, Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species/.10.5. Fire /see 1.7./.

Conservation Measures: Approximately 24.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

388. Scientific Name: *Monticola solitarius*

Species Authority: (Linnaeus, 1758)

Common Names: Blue Rock-thrush, or Blue Rock Thrush (English), Tsenher jijir or tsarmyn hööndei (Mongolian)

Subspecies in Mongolia: *M. s. philippensis* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2005) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia. It is also connected with its limited occurrence and unknown population. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; Senegal; Mauritania; Gambia; Morocco; Sierra Leone; Mali; Liberia; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Gibraltar; France; Ghana; Niger; Andorra; Belgium; Nigeria; Germany; Switzerland; Italy; Tunisia; Cameroon; Libyan Arab Jamahiriya; Austria; Sweden; Slovenia; Chad; Malta; Croatia; Bosnia and Herzegovina; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Sudan; Bulgaria; Egypt; Turkey; Russian Federation; Cyprus; Ethiopia; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Brunei Darussalam; Australia; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan; Palau.

Regional Distribution: This species is found on mountain slopes with boulders and rocky outcrops in Nömrög River valley of Dornod province (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding area. There are no records of birds occurring in Mongolia during the non-breeding season (Fomin & Bold, 1991; Dawaa *et al.*, 1994).

Population: The global population consists of 500,000 - 3,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. This species possibly arrives in the recorded sites by late April-early May. It might be a breeding species at areas in the east. However, there is no true breeding record in Mongolia. According to Harrison (1975), it breeds on rocky hillsides, cliffs, and in open areas with rocky outcrops or ruined buildings. The nest is placed under an overhang of a bank, or in a hole in rocks or buildings. The Blue Rock-thrush eats a wide variety of insects and small reptiles in addition to berries and seeds. This species leaves the site by late August-early September.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. possibly on migration); 6. Rocky areas.

Dominant threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / overgrazing of livestock near summering and possible breeding sites of the species is a cause of habitat degradation associated with drought/, 1.7. Fires /forest and steppe fires may burn habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic / domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in the areas /; 8. Changes in native species dynamics- 8.2. Predators /potential predators Eurasian Eagle-owl, Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought /; 10. Human disturbance- 10.1. Recreation and tourism- 10.4. Transport / transport by car and local herders (busy roads) near non-breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 85.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

389. Scientific Name: *Muscicapa striata*

Species Authority: (Pallas, 1764)

Common Names: Spotted Flycatcher (English), Börtöt namnaakhai (Mongolian)

Subspecies in Mongolia: *M. s. Mongolia* , *M. s. naumanni* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2006) for further details)

Synonyms: *Motacilla striata* (Pallas, 1764)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Iceland; Cape Verde; Senegal; Western Sahara; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Togo; Niger; Andorra;

Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Gabon; Liechtenstein; Sao Tome and Principe; Libyan Arab Jamahiriya; Equatorial; Austria; Congo; Sweden; Angola; Namibia; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; South Africa; Hungary; Slovakia; Montenegro; Serbia; Albania; Botswana; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Zambia; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Zimbabwe; Turkey; Moldova; Lesotho; Russian Federation; Rwanda; Burundi; Tanzania; Uganda; Mozambique; Swaziland; Cyprus; Malawi; Ethiopia; Kenya; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Comoros; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Turkmenistan; Seychelles; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia.

Regional Distribution: This species breeds from Khovd River through Bulgan Rivers, east to Uyench River and to lower Bulgan River, possibly Khasagt Khairkhan (Mongol-Altai Mountain Range); northern Tarvagatai and Bulnai Mountains, south to Eg River through the northern Khangai range to upper Orkhon and Urd Tamir Rivers (Khangai Mountain Range); W&E Hövsgöl Lake from northern to southern ends (Hövsgöl Mountain Range); Orkhon-Selenge River basins; Minj, Tuul, Terelj, Balj, Huder, Bulnai, Herlen and Onon Rivers (Hentii Mountain Range). It migrates through the breeding areas, along river valleys, patchy woodland with tall vegetation, planted trees and open habitats in the Gobi-Altai Mountain Range, Great Lakes Depression, Southern Khangai Plateau, Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region; oases and open areas with tall bushes and trees in Northern and N Eastern Gobi (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Stubbe *et al.*, 1993; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 80,000,000 - 250,000,000 mature individuals. Global breeding and resident ranges are estimated at 16,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and non-breeding birds arrive in their breeding and summering sites by early-mid-May, depending on weather conditions. Late migrants were also found in the steppe by early June. Breeding season continues from June to August. Breeding habitats are deciduous and mixed forest with dense bushes, fruit trees and old poplars in mountain forest, forest steppe and river valleys (Bold *et al.*, 2005; Tsevenmyadag *et al.*, 2010; Gombobaatar, 2012). Both parents, but chiefly the female, build the nest against a tree trunk, supported by a dead twig, in tree trunk hollow or crevice caused by a break, in a hole, or on top of a broad branch at heights of at least 1.8-9 m. The nest is a cup of grass, thin twigs, roots, lichen, plant down, and spiderwebs, lined with small feathers, hair, fibres and dead leaves. Female lays 2-7 eggs of non-glossy very pale blue, greenish-blue, or creamy- white colour with reddish-brown or purplish- grey mottles and blotches at larger end. The female incubates the eggs for 11-15 days. Female feeds young at first with insects brought by male, and broods. Later both bring food to young. The young leave the nest at 12-14 days. Adults feed young up to three weeks after leaving nest. On migration, single individuals, or small groups occur in areas with deciduous and mixed forest (old poplar trees), bushes, and patchy forest, open steppe with scattered bushes and lake and river valleys in Mongolia. They leave the breeding site for wintering grounds by late August-mid-September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.3.- 5.7., 5.9., 5.13. with forest and tall bushes on feeding and migration), 6. Rocky areas (on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3.

Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

390. Scientific Name: *Muscicapa griseisticta*

Species Authority: (Swinhoe, 1861)

Common Names: Grey-streaked Flycatcher, Grey-spotted Flycatcher, or Spot-breasted Flycatcher (English), sevhet namnaakhai (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Russian Federation; China; Mongolia; Indonesia; Malaysia; Viet Nam; Singapore; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan; Palau; Papua New Guinea.

Regional Distribution: W. D. Busching, U. Zöphel from Germany and their colleagues found a single bird at Davaany Zörlög (10 km west of Ulaanbaatar) of Töv province on 11 June, 1990. An individual was also found in Hövsgöl Mountain in 1992 (Dawaa *et al.*, 1994).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The species migrates along central Mongolia possibly by early-mid-June (on spring migration) and late August-early September (on autumn migration). It feeds on flying insects in the air. An individual perches on an exposed branch and waits. When an insect flies past, the bird dashes out to snatch it. On migration, single birds are found in coniferous and mixed forest and are sometimes seen in open steppe with dense bushes.

Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.7. Fires; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. It passes through some protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

391. Scientific Name: *Muscicapa sibirica*

Species Authority: Gmelin, 1789

Common Names: Dark-sided Flycatcher or Sooty Flycatcher (English), Shiver namnaakhai (Mongolian)

Subspecies in Mongolia: *M. s. sibirica* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); del Hoyo *et al.* (2006) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Russian Federation; Kazakhstan; Afghanistan; Pakistan; India; China; Nepal; Mongolia; Bangladesh; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in Tes River (Great Lakes Depression); Khan Höhii, Tarvagatai, Bulnai Mountains and upper Orkhon and Urd Tamir Rivers (Khangai Mountain Range); Hövsgöl Mountain Range; Orkhon-Selenge River basins; upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen Rivers (Hentii Mountain Range); possibly in Degee and Nömrög Rivers and Ih Khyangan Mountain Range (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, along river valleys with patchy woodland and tall vegetation, planted trees and open habitats in Great Lakes Depression, Southern Khangai Plateau, Herlen-Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; oases and open areas with tall bushes and trees in Trans-Altai, Alashani and SW of Eastern Gobi (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar,

2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most migrating and breeding birds arrive in their breeding and summering sites by early-late May, depending on weather conditions. Breeding season continues from June to August. Breeding habitats are coniferous, deciduous and mixed forest with tall old trees and fruit trees in mountain taiga forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Chiefly the female builds a cup-shaped nest 2 to 18 m above the ground, on the branch of a tree or sometimes in a hole. The female lays 3-8 eggs of pale green colour with reddish or reddish-brown spots and blotches. From a late stage of chick development, both adults feed young on flying insects such as mosquitoes, beetles, flies, and other dipteran species and their larvae of forest in the country. Feeding behavior is like other flycatchers. On migration, single birds, or small groups of birds occur in coniferous and mixed forest and woodland and are sometimes seen in plantations, parks and gardens. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.3.- 5.7., 5.9., 5.13. with forest and tall bushes on feeding and migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

392. Scientific Name: *Muscicapa dauurica*

Species Authority: Pallas, 1811

Common Names: Asian Brown Flycatcher or Brown-breasted Flycatcher or Grey-breasted Flycatcher (English), Daguuryn namnaakhai (Mongolian)

Subspecies in Mongolia: It is monotypic. *M. l. latirostris* (see del Hoyo *et al.* (2006) for further details).

Synonyms: *Muscicapa latirostris* (Raffles, 1822); *Muscicapa grisola var* *Dauurica* Pallas, 1811

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Denmark; Sweden; Finland; Russian Federation; Tajikistan; India; China; Nepal; Mongolia; Bhutan; Myanmar; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at upper Orkhon and Urd Tamir Rivers (Khangai Mountain Range); Hövsgöl Mountain Range; Khantai and Buteel mountains; northern Eg River to Selenge Rivers (Orkhon-Selenge River basins); across Hentii Mountains, south to Tuul River and Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and upper Herlen Rivers (all-Hentii Mountain Range); Khalkh, Degee, and Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region mountains). It migrates through the breeding areas, along river valleys with patchy woodland and tall vegetation, planted trees and dry open habitats in Southern Khangai Plateau; Herlen-Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; oases and open areas with tall bushes and trees in Trans-Altai, Northern, Alashani, and SW Eastern Gobi (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in summering and breeding sites by early-mid-May, depending on weather conditions. Breeding begins in early-mid-June. Breeding habitats are deciduous, mixed and rarely in coniferous forest in mountain taiga, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Nest is built by the female, placed on a tree branch or set in a fork of a tree. The female lays 4-5 eggs of glossy pale-olive grey, or bluish-green colour with reddish-brown speckles and mottles in a cup nest made of lichen, moss, and grasses and lined with finer materials. Incubation ranges from 11 to 13 days and is carried out by the female. These birds have one brood per year. Both sexes feed young mostly on insects. An individual perches on an exposed tree branch, immobile and erect, until it spots prey; then it flies out to catch it in flight and returns to its perch to eat. This species is one of the most common migrating species across the country, occurring almost everywhere on migration except for high mountains and wetlands. They occur singly and in small groups in almost all natural and artificial

habitats of the country, from Siberian taiga forest to Gobi Desert. Most individuals leave the breeding site for wintering grounds by late August-early September. Late migrants are found in early October in the steppe and Gobi Desert.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3. on migration, 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.3. - 5.7., 5.9., 5.13. near forest on feeding and migration), 6. Rocky areas (on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution-6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

393. Scientific Name: *Ficedula hypoleuca*

Species Authority: (Pallas, 1764)

Common Names: European Pied Flycatcher or Pied Flycatcher (English), Alag namnaa (Mongolian)

Subspecies in Mongolia: *F. h. sibirica* (see del Hoyo *et al.* (2006) for further details)

Synonyms: *Motacilla hypoleuca* (Pallas, 1764)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Iceland; Cape Verde; Senegal; Western Sahara; Mauritania; Gambia; Guinea-Bissau; Guinea; Morocco; Sierra Leone; Mali; Liberia; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Faroe Islands; Gibraltar; Burkina Faso; France; Ghana; Togo; Niger; Benin; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Cameroon; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Angola; Czech Republic; The Democratic Republic of the Congo; Slovenia; Chad; Poland; Malta; Croatia; Central African Republic; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Tanzania; Uganda; Cyprus; Ethiopia; Kenya; Israel; Jordan; Lebanon; Syrian Arab Republic; Islamic Republic of Iran; Kazakhstan; Tajikistan; Mongolia; Japan.

Regional Distribution: A single bird was recorded near Tolbo Lake of Bayan-Ölgii province on 1 June, 2006. Single birds were documented in Khovd town in western Mongolia on 22 September of 2006, 10 May of 2007, and 4, 9 & 14 October of 2007 (Bräunlich, 2006).

Population: The global population consists of 40,000,000 - 80,000,000 mature individuals. Global breeding and resident ranges are estimated at 7,710,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The species passes through western Mongolia mid-May–early June (on spring migration) and late September –mid-October (on autumn migration). It is found in deciduous trees where insect population is abundant. In Europe it is also found in deciduous woodland and planted trees. It is possibly found in deciduous forest, planted poplar and fruit trees, and mixed forest with bushes and young deciduous trees in western Mongolia. This species chooses a prominent perch from which to make rapid forays after insect prey in the air, chiefly flying insects such as mosquitoes, flies, and other terrestrial insects. The records in Khovd town are comparatively late for this group of migrants.

Habitat Type: Potential habitats are 1. Forest (1.4.); 3. Shrub-land (3.4.); 11. Artificial – Terrestrial (11.3., 11.4.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3. Extraction- 1.3.1. Mining, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism, 1.7. Fires; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire.

Conservation Measures: Specific conservation measures have not been implemented for this species. Migrants pass through some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

394. Scientific Name: *Ficedula zanthopygia*

Species Authority: (Hay, 1845)

Common Names: Yellow-rumped Flycatcher, Tricolored Flycatcher or Korean Flycatcher (English), Guulin namnaa or guulin khondloi namnaakhai (Mongolian)

Synonyms: *Muscicapa zanthopygia* / *xanthopygia* (Hay, 1845)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed

as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; Mongolia; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Singapore; Brunei Darussalam; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests in deciduous forest (willow, old birch and poplar trees) with dense bushes and tall cover in forest steppe and valleys of Khalkh and Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates across the breeding grounds and can be found in deciduous forest in Terelj , upper Tuul and Onon River valley (Hentii Mountain Range) (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). P.Amartövshin, members of the Mongolian Ornithological Society and birders from Belgium saw and photographed a bird on poplar trees at vegetable fields of the Bayan bag, Bayandalai sum, Ömnögobi province on 6 June, 2010 (P.Amartuvshin pers. comm. and photographs).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and non-breeding individuals arrive in their breeding and summering sites by early – mid-May. Breeding begins in early June. Breeding habitats are large deciduous forests in taiga forest and valleys of large rivers. Mainly female builds own nest in a tree or tree hole. The nest is a small cup of moss and dead leaves, spiders web and thin twigs, lined with hair. Breeding ecology of the species has been poorly studied in Mongolia. According to Wang *et al.* (2008), the nest is placed in a deciduous tree (mostly dead birch trees), nest boxes, in a cavity on a brick wall, or a cavity in a tree trunk. The female lays 4-7 eggs of pale blue to whitish-pink colour with reddish-brown or rusty speckles. The eggs are incubated by the female alone and males were observed feeding their incubating mate. The mean incubation period was 12-14 days (Harrison, 1975). Both male and female feed the young on terrestrial and forest flying insects and their larvae. They catch the prey on the ground or in the air. All nestlings from the same clutch fledged on the same morning. After the breeding season, they find their own food and restlessly feed until autumn migration. On migration the species occurs as single individuals and small flocks of 3-6 birds in deciduous and mixed forest along river valley, mountain forest steppe and taiga forest in Mongolia. It is also rarely found in planted trees in towns and cities on migration. Most individuals leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.3.- 5.7., 5.9., 5.13. near forested areas on feeding and migration); 6. Rocky areas (on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. Urban Areas on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this is a potential threat to the species/; 5.

Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in migrating and breeding sites/ 7.2. Storms /nest failure from a storm in north China (Wang *et al.*, 2008)/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawks in Mongolia on migration. In Northern China, Siberian Weasel (*Mustela sibirica*) and Japanese Sparrow Hawk (*Accipiter gularis*) (Wang *et al.*, 2008) on migration/, 8.3. Prey or food base /a decrease in density of prey species number of prey species due to habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species in Mongolia and North China (Wang *et al.*, 2008)/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 29.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

395. Scientific Name: *Ficedula narcissina*

Species Authority: (Temminck, 1835)

Common Names: Narcissus Flycatcher (English), Naran namnaa (Mongolian)

Subspecies in Mongolia: *F. n. narsissina* (see del Hoyo *et al.* (2006) for further details)

Synonyms: *Muscicapa narsissina* (Temminck, 1835)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: There is only one record of the species in the country.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Russian Federation; China; Mongolia; Indonesia; Thailand; Malaysia; Viet Nam; Hong Kong; Taiwan, Philippines; Republic of Korea; Japan; Australia and Singapore.

Regional Distribution: Sh.Boldbaatar (MAS) and American colleagues from American Natural History Museum collected a breeding male in Nömrög River valley on 25 May, 1998. According to their descriptions on the species and their findings, this species probably breeds in deciduous forest (willow, birch, poplar trees) in the valley of Nömrög River (Tseveenmyadag, 2000; Boldbaatar, 2002; Tseveenmyadag & Bold, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The species is found in deciduous and mixed forests in the country. However, breeding record has not been confirmed in Mongolia. This species may breed in deciduous and mixed forest in eastern Mongolia. Breeding season begins possibly late May–early June. According to Wang *et al.* (2008), this species nests on nine plant species including *Betula dahurica*, *Salix*

caprea, *Ulmus propinqua*, *Pinus tabulaeformis* and others. Clutch size is 3- 6. The eggs are of very pale blue colour with reddish speckles. Female builds own nest. The nest is a small cup of moss and dead leaves, spider's web and thin twigs, lined with hair. The female incubates the eggs for 12–14 days. Both adults care for and feed the young on insects and their larvae caught on the ground and in the air. They occur in deciduous forest in lake and river valleys in the east. They leave the breeding site for wintering grounds possibly by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Threats are similar to Yellow-rumped Flycatcher as follows:

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in migrating and breeding sites/ 7.2. Storms /nest failure from a storm in north China (Wang *et al.*, 2008)/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon migration, Eurasian Hobby and Eurasian Sparrow Hawks in Mongolia on migration. In Northern China, Siberian Weasel (*Mustela sibirica*) and Japanese Sparrow Hawk (*Accipiter gularis*) (Wang *et al.*, 2008) on migration/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species in Mongolia and North China (Wang *et al.*, 2008)/, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. The species passes through protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

396. Scientific Name: *Ficedula mugimaki*

Species Authority: (Temminck, 1835)

Common Names: Mugimaki Flycatcher or Black and orange Flycatcher (English), Taigyn namnaa or taigyn namnaakhai (Mongolian)

Synonyms: *Muscicapa mugimaki* (Temminck, 1835)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Russian Federation; China; Mongolia; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at upper Onon River and possibly in Darkhad Depression (Hövsgöl Mountain Range). It was found in Khalkh and Nömrög River valleys during the breeding season (Tugarinov, 1932; Gagina, 1960; Rogacheva, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. This species surely breeds at upper Onon areas and most possibly in deciduous forests in the eastern part of Hövsgöl Mountain Range. It may breed in Khalkh and Nömrög River valleys. Breeding habitats in the areas are deciduous and mixed forest with old trees in mountain taiga and river valleys at higher elevations. Birds arrive in breeding and summering sites by early to mid-May. Breeding begins in late May to early June, depending on weather conditions and food availability. Breeding ecology of the species has not been studied in Mongolia. This species nests on branches close to a trunk in high deciduous trees (Bold *et al.*, 2005). Nest is a small cup made of moss and dead leaves, and thin twigs, lined with hair. Clutch size is 3- 8. The egg colour is whitish-blue with reddish-brown spots and speckles. The female incubates the eggs for 12–14? days. Both sexes care for and feed the young on flying insects and their larvae caught on the ground, in tree canopies, and in the air. On migration, they occur alone or in small groups, in deciduous forest and lake and river valleys in the east, feeding on flying insects in the tree canopy.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution-6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in migrating and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawks on migration/, 8.3. Prey or food base /a decrease in density of prey species number of prey species due to habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 31.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Muscicapidae

397. Scientific Name: *Ficedula albicilla*

Species Authority: (Pallas, 1811)

Common Names: Taiga Flycatcher (English), Khurgan namnaa or khurgan namnaakhai (Mongolian)

Taxonomical Notes: *Ficedula parva* (Sibley & Monroe, 1990&1993) has been split into *F. parva* and *F. albicilla* following Svensson *et al.* (2005).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, forest fire, logging, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: United States; Iceland; Senegal; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Oman; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Brunei Darussalam; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at upper Khovd River across Yolt River (Mongol-Altai Mountain Range); the main range of N Khangai -Tavragatai and Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake, Delgermörön and Eg Rivers, east to Buteel and Khantai Ranges and north to the country border (Hövsgöl Mountain Range); Orkhon, Selenge, and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and Herlen Rivers south to Bogd Khaan Mountain (Hentii Mountain Range) (except for alpine meadow). It migrates through the breeding areas, river valleys with deciduous forest and dry open habitats in Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression; oases and bushy areas in the Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Kozlova, 1930; Bold, 1969; Erdenebat, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and non-breeding individuals arrive in summering and breeding sites by late April – mid-May, depending on weather conditions. Breeding begins in late May-early June. Breeding habitats are large deciduous and mixed forest with tall bushes and mature fruit trees in mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is placed on the side of a tree, supported by twigs, in a hollow or hole in a tree-trunk, or hole in wall at 1-3 m high. Female

builds own nest. The nest is a small cup, mainly of moss and dead leaves, spiders' webs and plant down, with thin twigs on outside, lined with hair. The female usually lays 5-6, rarely 4-7 eggs of glossy whitish, or faintly buff or blue-green colour with reddish-brown, rusty fine speckles, mottles and poorly defined markings. The eggs are incubated by the female alone; she is fed by male. Both parents feed young on flying insects and their larvae for 11-16 days in the nest. This is one of the most common migrating species through the country. The species occurs almost everywhere, except for high mountains and wetlands in Mongolia on migration. Individuals occur singly or in small groups of 3-8 individuals in all natural and artificial habitats from Siberian taiga forest to Gobi Desert of the country. Most individuals leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. Late migrants are found in early October in the steppe and Gobi Desert. Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3. on migration, 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (5.3. - 5.7., 5.9., 5.13. near forest on feeding and migration), 6. Rocky areas (on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticide used is a cause of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds have been found underneath all types of power lines in the steppe during the autumn and spring migration (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk prey upon this species on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Cinclidae

398. Scientific Name: *Cinclus cinclus*

Species Authority: (Linnaeus, 1758)

Common Names: White-throated Dipper, Dipper, Eurasian Dipper, Common Dipper, White-breasted Dipper or White-billied Dipper (English), Gyalaanomruut kharzlai or gyalaanomruut (Mongolian)

Subspecies in Mongolia: *C. c. baicalensis* (see Howard & Moore (1994) and del Hoyo *et al.* (2005) for further details)

Synonyms: *Sturnus cinclus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, drought and human disturbance, it has been assessed as Least Concern owing to its common occurrence and wide distribution across Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Russian Federation; Lebanon; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar. It is regionally extinct in Cyprus.

Regional Distribution: This species breeds in Yolt, Buyant, Khovd Rivers, south-east to Bulgan River (Mongol-Altai Mountain Range); Mönh Khairkhan massif, east to Gobi-Altai (Urt River and Biger Lake) (Gobi-Altai Mountain Range); south to Aj Bogd; Khangai (Tarvagatai Mountain), Upper Minj, Tuul, Terelj, Onon, Balj, Huder, and Bulnai Rivers (Hentii Mountain Range) and Darkhad Depression and Hövsgöl Mountain Range; Orkhon, Selenge, Eg, Kharaa, and Yeröö Rivers (Orkhon-Selenge River basins); Khalkh, Degee, and Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region); Bulgan, Uyenich and Bodonch Rivers (Baruunkhurai Depression). It winters on open water in mountain rivers and lakes in breeding sites and Hövsgöl Lake, Eg River, Shishgid, and Dood Lake (Hövsgöl Mountain Range); Tes, Khovd, Böhmörön Rivers (Mongol-Altai and Great Lakes Depression); Tamir, Khanui, Ider, Chuluut and upper Orkhon Rivers (Khangai Mountain Range) and lower Orkhon, Selenge, Tuul, Ulz and Herlen Rivers (Hentii Mountain Range) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Busching, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 1,000,000 - 4,000,000 mature individuals. Global breeding and resident ranges are estimated at 8,830,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding pairs nest on the ground underneath banks and in crevices of rocks, on roots of waterside trees, and behind waterfalls of clear, fast-flowing streams and rivers with rocky bottoms in mountains and rarely in valleys with permanent streams (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a bulky structure of moss, with an internal cup of moss and grasses, lined with dead leaves. Both adults build the nest together. The female usually lays 5, rarely 3-8 eggs of a non-glossy white colour. The female incubates the eggs alone for 15-18 days. Both parents care for and feed young on invertebrates and their larvae, mayfly (Ephemeroptera), dragonfly (Odonata), fly (Diptera), shrimps (*Gammarus* sp.), beetles (Coleoptera), and small fishes in water for 19-25 days. The young can dive and swim before they can fly. During seasonal movements they descend and occur in areas of unfrozen fresh water rivers and lakes. Individuals are often found flying along unfrozen open water in rivers and lakes in winter. They occur usually singly, or very rarely in pairs in breeding season and in winter. Both breeding and wintering seasons, it dives as well as walks into the water. In spring, they ascend to breeding areas in upper rivers and streams with boulders, rocks and trunks of old trees.

Habitat Type: 1. Forest (1.1., 1.4. with rivers and streams both breeding and wintering seasons); 5. Wetlands (inland) (5.1., 5.2., 5.5., 5.10., 5.11.); 12. Artificial – Aquatic (12.1., 12.3., 12.5., 12.6., 12.9.).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/ 6.3. Water pollution -6.3.2. Domestic-6.3.3. Commercial /water pollution poisoned with heavy metals has been becoming serious threat to the species/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Passeridae

399. Scientific Name: *Passer ammodendri*

Species Authority: Gould, 1872

Common Names: Saxaul Sparrow (English), Zagiin borshuvuu or zagiin bor shuvuu (Mongolian)

Subspecies in Mongolia: *P. a. stoliczkae* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation in Gobi Desert areas. The number of breeding pairs in some areas of the Gobi Desert areas has been decreasing due to Saxaul forest use, drought and overgrazing. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; Islamic Republic of Iran; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia.

Regional Distribution: This species breeds in southern Shargyn Gobi, Baruunkhurai Depression, Gobi-Altai Mountain Range, Trans-Altai Gobi, east to south of the Eastern Gobi with Saxaul forest (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Oddie, 2000; Enkhnasan & Gombobaatar, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding habitats are Saxaul (*Haloxylon ammodendron*) forest with large and old trees in Gobi Desert. Breeding ecology has been poorly studied in Mongolia. Breeding pairs nest in a hole in Saxaul trees, under/in a stick nest of raptors and other birds such as Long-legged Buzzard, Upland Buzzard, Black Kite and Northern Raven in Saxaul forest, in a hole of sandy river banks, rarely in crevices and cracks of cattle shelters and nest boxes near Saxaul forest in Gobi Desert (Bold *et al.*, 2005; Enkhnasan & Gombobaatar, 2005; Gombobaatar, 2012). Parent birds may build a neat rounded domed structure with side entrance, or among creepers or in crevices it might be an untidy domed structure, or in holes maybe only a cup of straw and plant stems, lined with feathers, hair and wool. The female usually lays 4-6 eggs of slightly glossy white colour, or whitish grey colour with rusty grey or yellowish brown spots, small blotches or speckles. Chiefly the female incubates the eggs for 11-14? days. Males and females share in feeding their young every 4 to 10 minutes. They feed the chicks on terrestrial arthropods including beetles, grasshoppers, spiders, earthworms, and larvae in the nest, bringing prey in the bill. In the non-breeding season, they form flocks consisting of 6-60 individuals foraging seeds of a variety of plants including on the ground near Saxaul, poplar (*Populus* spp.), and tamarisk (*Tamarix* spp.) trees, sometimes far from the trees. After the breeding season, the flocks feed on fruits and seeds of *Nitraria sibirica* in Gobi Desert. In winter, they come close to cattle shelters and winter campsites of local herders and feed on seeds. The flocks roost in Saxaul trees, rarely under the roofs of deserted cattle shelters near Saxaul forest.

Habitat Type: 1. Forest (Saxaul forest in Gobi Desert); 5. Wetlands (5.1. streams/creeks only for drinking); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.2. near Saxaul tree in non-breeding period for food).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /all year around camels graze Saxaul trees selecting large and tall trees with a nest of the species (Enkhnasan & Gombobaatar, 2005)/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence/a cutting of old and large Saxaul trees with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /Saxaul forest fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season /; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Sparrowhawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/, 9. Intrinsic factors- 9.9. Restricted range /this factor always negatively affect the population number of this species because of they live in very limited areas with Saxaul trees/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 41.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Passeridae

400. Scientific Name: *Passer domesticus*

Species Authority: (Linnaeus, 1758)

Common Names: House Sparrow (English), Orongiin borshuvuu or orongiin bor shuvuu (Mongolian)

Subspecies in Mongolia: *P. d. domesticus* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Fringilla domestica* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; Mexico; Guatemala; El Salvador; Belize; Honduras; Nicaragua; Costa Rica; Cuba; Panama; Cayman Islands; Peru; Ecuador; Colombia; Chile; Haiti; Bahamas; Brazil; Argentina; Turks and Caicos Islands; Dominican Republic; Aruba; Bolivia; Puerto Rico; Paraguay; Guadeloupe; Trinidad and Tobago; Falkland Islands (Malvinas); Bermuda; Iceland; South Georgia and the South Sandwich Islands; Cape Verde; Gambia; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Nigeria; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; The Democratic Republic of the Congo; Slovenia; Poland; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Indonesia; Thailand; Lao People's Democratic Republic; Viet Nam; Cambodia; Japan. It has been introduced to Australia; British Indian Ocean Territory; Comoros; Jamaica; Lesotho; Malawi; Maldives; Mauritius; Netherlands Antilles; New Caledonia; New Zealand; Reunion; Saint Pierre and Miquelon; Seychelles; Swaziland; Tanzania; United States; Uruguay; Vanuatu; Venezuela; Virgin Islands, British; Virgin Islands, U.S; Zimbabwe.

Regional Distribution: This species nests in holes and crevices of man-made substrates at almost all settlements (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012) from Achit Lake valley, south to Bulgan River valley, through the mountain range (Mongol-Altai Mountain Range and Baruunkhurai Depression); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range); Northern Uvs Depression and Great Lakes Depression; from eastern Khan Höhii Mountain, east to the eastern country border; through Ulz River valley, north to the country border; across Khangai Mountain Range to Arvaiheer and further to Ulaanbaatar city; Eastern Mongolian Plain, Middle Khalkh Steppe and Mongol Daguur Steppe; Valley of the Lakes; from Eastern Mongolian Plain to Buir Lake-Khalkh River-Khyangan region and Gobi (Alashani, Northern and Eastern Gobi) (Kozlova, 1930; Sergelen, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 540,000,000 mature individuals. Global breeding and resident ranges are estimated at 34,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June and continues to mid-August. Breeding habitats are all human settlements and buildings near the settlements across the country. Breeding pairs nest in crevices, holes and cracks of man-made, also rarely natural substrates. The nest is a neat rounded domed structure with side entrance, in crevices or crevices an untidy domed structure, or in holes may be a cup of straw, plant stems and any rubbish such as paper, string or cloth, lined with feathers, hair and wool. The nest is built by both sexes, but mainly by male. The female usually lays 3-5 eggs of slightly glossy white, or faintly tinted greenish or grayish colour with grey, blue grey, greenish-grey, purplish-grey, black, brown, or purplish brown spots, speckles, or small blotches. The eggs are incubated chiefly by the female for 11-14 days. Both parents care for and feed young on terrestrial arthropods including beetles, grasshoppers, spiders, flies and their larvae in the nest for 15 days. They bring prey in the bill. In the non-breeding season, they form flocks consisting of 4-60 individuals foraging seeds and of a variety of plants and leftovers of human food on the ground. Groups roost under the roof of buildings, cattle shelters, holes and crevices of buildings in winter. The colour of the birds in large towns and cities is darker than in small settlements due to pollution and dirt on feathers.

Habitat Type: 1. Forest (edges of 1.4. near human settlements); 3. Shrub-land (near 3.4. close to human settlements); 4. Grassland (edges of 4.4. near human settlements); 11. Artificial – Terrestrial (11.2.-11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)- 1.7. Fires /man-made fires may burn nests/; 3. Harvesting (hunting or gathering) -3.5. Cultural, scientific, or leisure activities -3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed by people for souvenirs in shops and other public service areas/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.3. Temperature extremes /overcooling of eggs and chicks in the nest in early spring/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Eurasian Sparrowhawk and domestic cat prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of fences and buildings using pipes with open tops is a cause of death for many individuals in towns or villages/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Passeridae

401. Scientific Name: *Passer montanus*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Tree Sparrow or Tree Sparrow (English), Heeriin borshuvuu or heeriin borshuvuu (Mongolian)

Subspecies in Mongolia: *P. m. montanus*, *P. m. dilutus* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Fringilla montanus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, forest fire, logging, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Canada; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; United Arab Emirates; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Christmas Island; Indonesia; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Hong Kong; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan. It has been introduced to Australia; Guam; Marshall Islands; Micronesia; Northern Mariana Islands; Palau; Philippines; Timor-Leste; United States.

Regional Distribution: This species breeds from Mongol-Altai Mountain Range to Khalkh River valley; from Mongol-Altai south to Bulgan and Uyench River valleys (Baruunkhurai Depression); further south to Baitag Bogd, oases in Zakhui, and Ehiin Gol (Trans-Altai Gobi), to Tost Dalanzadgad town; south-eastern border Zamyn-Ud; scarcely distributed in Mongol-Altai mountain, Great Lakes Depression, Eastern Mongolian Plain and Gobi (Kozlova, 1930; Sergelen, 1986; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Sumiya & Skryabin, 1989; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Tsegmid & Uganbayar, 2006; Boldbaatar, 2008).

Population: The global population consists of 100,000,000 - 500,000,000 mature individuals. Global breeding and resident ranges are estimated at 39,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June and continues to mid-August. Breeding pairs nest in tree holes, under/in raptor nests and crevices and holes of man-made substrates in mountain forest, forest steppe, river valleys and settlements (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Adult birds build a domed structure or untidy cup of plant stalks and twigs, lined with down and feathers. Nest materials are paper, string or cloth, lined with feathers, hair and wool. The female usually lays 4-6, rarely 2-9 eggs of slightly glossy ground colour white to very pale grey with dark brown, sometimes purplish or greyish spots, small blotches or speckles. The eggs are incubated chiefly by the female for 11-14 days. Both parents care for and feed young on terrestrial arthropods including beetles, grasshoppers, spiders, flies and their larvae in the nest for 12-14 days. They bring prey in the bill. In the non-breeding season, they are gregarious. Flocks consist of 4-100 individuals foraging seeds of a variety of plants and leftovers of human food on the ground in the non-breeding season. Groups roost in trees, under the roof of buildings, cattle shelters, holes and crevices of buildings all year around. The colour of the species in large towns and cities is darker than small settlements and field due to pollution and dirt on feathers same as House Sparrow.

Habitat Type: 1. Forest (1.4. except for dense forest); 3. Shrub-land (3.4.); 4. Grassland (near 4.4. near human settlements); 11. Artificial - Terrestrial (11.2.-11.5.).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn their breeding habitats and nests with eggs and occasionally young/; 3. Harvesting (hunting or gathering) -3.5. Cultural, scientific, or leisure activities -3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed by people for souvenirs in shops and other public service areas/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the nest in early spring/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of fences and buildings using pipes with open tops is a cause of death for many individuals in towns or villages/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Passeridae

402. Scientific Name: *Petronia petronia*

Species Authority: (Linnaeus, 1766)

Common Names: Rock Sparrow (English), Khadny borshuu or khadny bor shuvuu (Mongolian)

Subspecies in Mongolia: *P. p. brevirostris* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Fringilla petronia* (Linnaeus, 1766)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Morocco; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Germany; Switzerland; Italy; Tunisia; Monaco; Libyan Arab Jamahiriya; Austria; Slovenia; Poland; Malta; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of

Macedonia; Bulgaria; Turkey; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia.

Regional Distribution: This species breeds from Mongol-Altai Mountain Range (Siilhem Mountain, Aчит Lake valley, Höh Serh, Jargalant Khairkhan, and Mönh Khairkhan Mountains - up to 2,900 m asl) N Siilhem Mountain to lower Torkholig River, northern Uvs and Telmen Lakes (Great Lakes Depression and Northern Uvs Depression); Khangai, including Southern Khangai Plateau and Hentii Mountain Ranges (except for dense taiga forest); Hövsgöl Lake and Darkhad Depression (no record in Eastern Hövsgöl); from lower Delgermörön, north to Suhbaatar town Selenge province; Middle Khalkh Steppe and Mongol Daguur Steppe; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes, Baruunkhurai Depression and Gobi (Trans-Altai -Takhiin Shar Nuruu, Tsagaan Bogd Mountains, Northern, Alashani and Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Tsegmid & Uuganbayar, 2006).

Population: The global population consists of 20,000,000 - 250,000,000 mature individuals. Global breeding and resident ranges are estimated at 9,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are open mountain areas, dry plains, and Rocky areas with granite rock cliffs, rock boulders and broken rocks. Breeding pairs nest in a hole in rock crevice and cracks, tree hollow, old building, wall, or in /under the nest of raptors and other birds (Upland Buzzard and Northern Raven) nests in high mountains, the edges of mountain forest, forest steppe, mountain steppe, desert steppe, Gobi Desert and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a domed structure of plant stalks and roots, lined with feathers, hairs, down, cashmeres, and wool. The female usually lays 5-6 eggs of slightly glossy white, or greenish-white colour with brown, dark brown and grey spots, speckles and fine blotches. The female chiefly incubates the eggs for 12-15 days. Both sexes care for and feed young on terrestrial arthropods including beetles, grasshoppers, spiders, flies and their larvae in the nest for 21 days. In the non-breeding season, it feeds on the arthropods and seeds and fruits of various plants on the ground. They form flocks consisting of 6-80 individuals and feed on seeds of tall plants near breeding sites. The flocks roost in well-sheltered cliffs, rocks, trees, cattle shelters and other human-made substrates. In winter they move down to local herders' winter camp sites, urban areas and wheat fields near settlements.

Habitat Type: 4. Grassland (4.4. with granite rocks and cliffs); 5. Wetlands (near 5.1. for drinking); 6. Rocky areas; 7. Caves and Subterranean Habitats (non-aquatic) (7.2.); 8. Desert (8.2. with granite); 11. Artificial - Terrestrial (11.2. with granite rocks and cliffs, 11.4.- 11.5. in feeding and wintering).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.7. Fires / steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds have been found underneath all types of power lines in the steppe and electrocution by 15 KV power lines is one of the significant threats to the species (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry,

transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the nest in early spring/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006) and Eurasian Sparrowhawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of fences and buildings using pipes with open tops is a cause of death for many individuals in towns or villages/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Passeridae

403. Scientific Name: *Montifringilla nivalis*

Species Authority: (Linnaeus, 1766)

Common Names: White-winged Snowfinch (English), Tsasny bogshoodoi or tsasny bor shuvuu (Mongolian)

Subspecies in Mongolia: *M. n. alpicola* (see Clement *et al.* (1993) for further details)

Synonyms: *Fringilla nivalis* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is threatened by temperature extremes and is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Portugal; Spain; France; Andorra; Germany; Switzerland; Italy; Liechtenstein; Austria; Czech Republic; Slovenia; Bosnia and Herzegovina; Hungary; Montenegro; Serbia; Albania; Greece; the Former Yugoslav Republic of Macedonia; Turkey; Russian Federation; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Mongolia. It is regionally extinct in Croatia.

Regional Distribution: This species breeds through southern Mongol-Altai Mountain Range, mountains near Höh Serh, Mönh Khairkhan and across Gurvansaikhan Mountain (more than 2,200 m asl) (Gobi-Altai Mountain Range); Southern Khangai Plateau; Baruunkhurai Depression (Baitag Bogd, Khavtagiin Nuruu, Takhiin Shar Nuruu Mountains); Trans-Altai Gobi (Tsagaan Bogd Mountain) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005).

Population: The global population consists of 3,000,000 - 20,000,000 mature individuals. Global breeding and resident ranges are estimated at 5,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding habitats are Rocky areas in high

mountains at altitudes of 2,200-4,000 m asl in Mongol-Altai, and Gobi-Altai mountain ranges and their neighbouring high mountains. Breeding pairs nest in holes, crevices and cracks in rocks, cliff-faces and rarely in man-made substrates in high mountain steppe and subalpine and alpine meadows with cliffs, rockslides and buildings (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a cup of grass, moss, leaves and feathers, lined with feathers and hair. The female usually lays 4-5, rarely 6-7 eggs with glossless, or very slightly glossy white colour. Both sexes, but female chiefly incubates the eggs for 13-14 days. Both parents feed young on terrestrial insects and larvae in the nest for c. 21 days. In breeding season, individuals occur singly or in pairs feeding on the ground, and drinking water in creeks, spring and other water points in high mountains. At midday they descend and have a bath in cool water of the spring and creeks. In the non-breeding season, they forage a variety of seeds on the ground. It forms flocks consisting of 5-30 individuals and descend to lowlands, mountain hill side, or winter cattle shelter for feeding on seeds in tall plants and plants near the creeks and springs and leftovers of food of local families in high mountains in harsh winter .

Habitat Type: 4. Grassland (4.4. with granite rocks and cliffs only during seasonal movements); 5. Wetlands (near 5.1. for drinking); 6. Rocky areas; 7. Caves and Subterranean Habitats (non-aquatic) (7.2.); 11. Artificial – Terrestrial (11.2. with granite rocks and cliffs, 11.4.- 11.5. in feeding and wintering).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Eagle-owl and Eurasian Sparrowhawk prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of fences and buildings using pipes with open tops is a cause of death for many individuals in towns or villages/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Passeridae

404. Scientific Name: *Pyrgilauda davidiana*

Species Authority: (Verreaux, 1871)

Common Names: Small Snowfinch or Pere David's Snow Finch (English), Mongol bojirog or mongol bor shuvuu (Mongolian)

Subspecies in Mongolia: *P. d. davidiana*, *P. d. potanini* (see Clement *et al.* (1993); Dawaa *et al.* (1994) for further details)

Synonyms: *Montifringilla davidiana* (Verreaux, 1871)

Taxonomical Notes: Based on biological and ecological similarity and evolution of the genus, BirdLife Taxonomic Working Group of the BirdLife International (2011) has treated this species as *Montifringilla davidiana*. However, Mongolian Bird Taxonomy and Rarity Committee has decided to not to follow BirdLife International (2011).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: S.Gombobaatar (NUM & MOS), B.Delgermaa (SSIA, Mongolia), B.Yumjirmaa (MOS, Mongolia), and E.Monks (ZSL, UK).

Global Distribution: Russian Federation; India; China; Mongolia.

Regional Distribution: This species breeds in Tolbo, Achit, and Uureg Lake valleys (Mongol-Altai Mountain Range); Tsast mountain valley, from eastern Mönkh Khairkhan Mountain, east to Gurvansaikhan range and Tost Mountain valleys (Great Lakes Depression and Gobi-Altai Mountain Range); Northern Uvs Depression; Southern Khangai Plateau and eastern Khangai Mountain Range; from farther east to Bogd Khaan Mountain and upper Herlen River valley; east along Herlen River valley (Middle Khalkh Steppe) to Choibalsan town; Ulz River basin, Mongol Daguur Steppe; from Choibalsan town to southern ErdeneTsagaan Mountain. It is found in open dry steppe and mountain valleys in Eastern Mongolian Plain, Valley of the Lakes and Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) during seasonal movements (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Tsegmid & Uuganbayar, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding ecology has been poorly studied in Mongolia. Breeding season begins early to mid-June. Breeding habitats are variety of open steppe and mountain habitats in forest steppe, steppe, desert steppe, mountain steppe and low hills of mountains steppe. Breeding pairs nest in deserted and old burrows of rodents, Brandt's Vole (*Lasiopodomys brandti*), Mongolian Gerbil (*Meriones unguiculatus*), Long-tailed Ground Squirrel (*Spermophilus undulatus*) and Daurian Ground Squirrel (*Spermophilus daurica*) on the ground in arid steppe and mountain steppe and semi-desert with sparse vegetation (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a cup of dried fine grasses, plant stems and downs, lined with finer grasses, hairs and feathers. Female lays 5-6 eggs with glossless, or very slightly glossy white, or grayish white colour?. Both parents incubate the eggs. Both sexes care for and feed young on terrestrial arthropods, such as spiders, beetles, grasshoppers, ants, flies and their larvae. They forage on the ground, or rarely fly in short distance to catch the arthropods. The young birds stay together with parents and feed on the invertebrates and seeds along tall vegetated areas, or patchy vegetated areas near marmot and Brandt's Vole burrows in the steppe. In the non-breeding season, they dominantly feed on seeds of various plants. They form flocks consisting of 5-60 individuals sometimes joining with Mongolian Larks and Horned Larks in the steppe. In harsh and snowy winter, they feed on seeds in areas with thin snow near sides of roads, grazed by cattle and also winter near campsites of local herders. The flocks roost in areas with tall plants such as *Achnatherum splendens* and *Caragana* spp. in open steppe. The flocks move down to mountain valleys, rivers and lakes during seasonal movements.

Habitat Type: 4. Grassland (4.4.); 5. Wetlands (near 5.1., 5.2. for drinking); 6. Rocky areas (in winter), 8. Desert (8.2. during seasonal movements); 11. Artificial – Terrestrial (11.2., 11.3. in winter and seasonal movement).

Dominant threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.7. Fires / steppe fires may burn breeding habitats/; 3. Harvesting (hunting or gathering) -3.5. Cultural, scientific, or leisure activities -3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed by people for souvenirs in shops and other public service areas/; 4. Accidental mortality- 4.1. By-

catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds have been found underneath all types of power lines in the steppe and electrocution by 15 KV power lines is one of the significant threats to the species (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the nest in early spring/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar, 2006), Merlin and Upland Buzzard prey on the species/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of fences and buildings using pipes with open tops is a cause of death for many individuals in towns or villages/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 6.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

405. Scientific Name: *Prunella collaris*

Species Authority: (Scopoli, 1769)

Common Names: Alpine Accentor, Collared Accentor or Rock Accentor (English), Tagiin khairuuldai (Mongolian)

Subspecies in Mongolia: *P. c. erythropygia* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Sturnus collaris* (Scopoli, 1769)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is threatened by temperature extremes and is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Morocco; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Ukraine; Bulgaria; Turkey; Russian Federation; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan;

Myanmar; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests in Höh Serh, Tsast Uul, Altan-Höhii, Kharkhira and Khasagt Khairkhan Mountains (higher than 2,300 m asl) (Mongol-Altai Mountain Range); Baga Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range); Otgontenger and Ih Jargalant (Khangai Mountain Range); east to Egiin Davaa (higher than 1,800 m asl) (Khangai Mountain Range); Asralt Khairkhan and Baga Hentii (Hentii Mountain Range) and mountains higher than 2,000 m asl in the Gobi (Trans-Altai and Alashani Gobi). It has been also recorded in mountains in Trans-Altai, Alashani and SW Eastern Gobi (Kozlova, 1930; Fomin & Bold, 1991; Stubbe *et al.*, 1993 Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Busching, 2004; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Nyambayar & Tseveenmyadag, 2009). Birds were seen and photographed in steppe mountains (Choiryn Bogd, Ih Sansar of Gobisumber province and Darkhan, Yazaar, and Toono Uul of Hentii province) and Herlen River valley (Middle Khalkh Steppe) during altitudinal movements early spring in 2005 and 2006 (S. Gombobaatar pers. comm. and photographs).

Population: The global population consists of 500,000 - 2,000,000 mature individuals. Global breeding and resident ranges are estimated at 10,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. During the seasonal movement, the species occurs in open steppe with rocky mountains and hillsides with rocks and cliffs in forest steppe. Breeding begins in late May-mid-June. Breeding pairs nest on the ground, or in low bushes close to ground, or in rock crevices with overgrown bushes on dry rocky mountain slopes in alpine and subalpine zones at altitudes above 1,800 m asl. The nest is a neat cup of plant stems and roots lined with moss, fine plant materials and feathers. The female usually lays 3-5 eggs of glossy unspotted azure -blue colour. Breeding ecology of species is poorly known in the country. Individuals and pairs occur in mountain areas with some low alpine vegetation and rocks. Both sexes incubate the eggs for 15? days. Both adults, additional helpers care for and feed young on terrestrial arthropods including insects, spiders, flies, and their larvae. After the young leave the nest, adult birds feed these young on the ground, or on rocks. In winter, individuals and pairs descend to rocky low hills with tall cliffs in mountain steppe and forest steppe. In winter they forage on the ground or rocks, eating plant matter including berries and seeds.

Habitat Type: 3. Shrub-land (3.4. seasonal movement); 4. Grassland (4.4. with rocks and cliffs during seasonal movements); 5. Wetlands (inland) (near 5.10., 5.11. During seasonal movements and feeding); 6. Rocky areas.

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others near breeding sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 17.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

406. Scientific Name: *Prunella himalayana*

Species Authority: (Blyth, 1842)

Common Names: Rufous-streaked Accentor, Altai Accentor, or Himalayan Accentor (English), Khimalain khairuuldai (Mongolian)

Synonyms: *Accentor himalaynus* (Blyth, 1842)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is threatened by temperature extremes and is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Turkmenistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Bhutan.

Regional Distribution: This species breeds in Tavan Bogd Mountain Massif, Tsengel Khairkhan, Tsast Uul, Mönh Khairkhan, Aj Bogd, Alag Khairkhan Mountains (Mongol-Altai Mountain Range); Khan Höhii and Otgontenger mountains (Khangai Mountain Range); Khoridol Saridag, Uran Dösh, Bayany nuruu, Belchir, and Bulnain Tsagaan Mountains (Hövsgöl Mountain Range); Asralt Khairkhan, Baga Hentii, and Hentii Khaan mountains (Hentii Mountain Range). It moves through breeding areas and lower altitudes during seasonal movements (Fomin & Bold, 1991; Sumiya & Skryabin, 1989; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Busching, 2004; Boldbaatar, 2005a; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-mid-June depending on weather conditions. This species nests in dense shrubs and dense bushes in alpine meadows, cliffs, rockslides and glacial moraines in alpine and subalpine zones (between 2,750-3,400 m asl) (Gombobaatar, 2012). In breeding season the species occurs in stony alpine meadows, bare rocky hillsides with sparse plants, avoiding boulders and trees. Breeding ecology is poorly known in Mongolia. Breeding pairs build their own nest on the ground in hollows under grass tussocks or rocks. The nest is a cup of roots, grasses and other plant materials lined with hair, feathers and softer grasses. Female lays 4-6 eggs of glossy very pale blue colour. The female incubates the eggs alone for 14-16 days. Both adults feed young on terrestrial invertebrates, such as flies (Diptera), beetles (Coleoptera), spiders, and small snails (del Hoyo *et al.*, 2005). In winter, it forms flocks of 6-30 individuals, forages on the ground and eats seeds, berries, and wintering buds of various plants. In winter, it descends to low hillsides of high mountains and occurs in grassy or rocky hillsides and mountain valleys.

Habitat Type: 3. Shrub-land (3.4. seasonal movement); 4. Grassland (4.4. with rocks and cliffs during seasonal movements); 5. Wetlands (inland) (near 5.10., 5.11. During seasonal movements and feeding); 6. Rocky areas.

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Live-stock- 1.1.4.1. Nomadic /livestock overgrazing near non-breeding and breeding sites of the species is a cause of habitat degradation. Cattle also destroy the nests with eggs and chicks/, 1.4. Infrastructure development - 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements and tourist camps near breeding and non-breeding sites are major disturbances for the species;/ 6.

Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, insecticide use, and drought in both non-breeding and breeding seasons has been threatening this species/, 9. Intrinsic factors- 9.9. Restricted range / restricted breeding range is a cause of low breeding success and possibly decrease in species abundance/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others near breeding sites have been destroying breeding habitats and disturbing this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 18.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

407. Scientific Name: *Prunella montanella*

Species Authority: (Pallas, 1776)

Common Names: Siberian Accentor or Mountain Accentor (English), Sibiriin khairuuldai (Mongolian)

Subspecies in Mongolia: *P. m. montanella* (see Dawaa *et al.* (1994) and del Hoyo *et al.* (2005) for further details)

Synonyms: *Motacilla montanella* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Canada; United States; Italy; Sweden; Czech Republic; Poland; Finland; Russian Federation; Lebanon; Iraq; Kazakhstan; India; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species migrates and winters in mountains with cliff-faces, rocks and open dry desert steppe, mountain steppe and forest steppe in Mongol-Altai and Gobi-Altai Mountain Ranges; rocky mountains in Great Lakes Depression; Khangai, Hövsgöl and Hentii Mountain Ranges (except for taiga forest and dense forest in river valleys); Orkhon-Selenge River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; Valley of the Lakes and the Gobi (Dzungar, Trans-Altai, Alashani, Northern and Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Busching, 2004; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a passage migrant in Mongolia. It is found in a variety of different habitats from forest to Gobi Desert on migration. Most passage migrants arrive in breeding sites by late April-early May. A breeding record of the species for the country has not been confirmed yet. Migrating birds are recorded throughout the country by late August-early September, depending on food availability and weather conditions. Del Hoyo *et al.* (2005) mentioned that the main diet of the species consists of insects such as beetles (Coleoptera) and their larvae, seeds and berries. They forage on the ground on migration. On migration, individuals or small flocks of 3-6 individuals sometimes join with Oriental Greenfinch and Brambling in Mongolia.

Habitat Type: 1. Forest (1.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (inland) (near 5.10., 5.11. on migration); 6. Rocky areas (on migration); 8. Desert (with rocks and cliffs 8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near feeding sites on migration of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near feeding sites is a major disturbance for the species/, 1.7. Fires /forest and steppe fires may burn migrating areas/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects poison migrants in the steppe and forest steppe/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding season/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding areas have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

408. Scientific Name: *Prunella fulvescens*

Species Authority: (Severtzow, 1873)

Common Names: Brown Accentor (English), Sharga khairuuldai (Mongolian)

Subspecies in Mongolia: *P. f. dahurica*, *P. f. mongolica* (see Howard & Moore (1994) and del Hoyo *et al.* (2005) for further details)

Synonyms: *Accentor fulvescens* (Severtzow, 1873)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is threatened by temperature extremes and is subject to habitat loss and degradation by livestock, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSSC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia.

Regional Distribution: This species breeds in Mongol-Altai and Gobi-Altai Mountain Ranges (up to 2,800 m asl), rocky mountains from Mongol-Altai to Shargyn Gobi; from Mongol-Altai, north to Northern Uvs Depression and Tes River valley; Khan Höhii Mountain, Tarvagatai and Bulnai Mountains, South Khangai Plateau (Khangai Mountain Range); Khoridol Saridag, Uran Dösh, Bayany Nuruu, Belchir and Bulnain Tsagaan Mountains (Hövsgöl Mountain Range); Asralt Khairkhan, Baga Hentii, Delgerkhaan and Hentii Khaan (Hentii Mountain Range). In winter it prefers low mountains. It is found in rocky mountains in Khangai (Zorgol Khairkhan, Ongon Khairkhan, Batkhaan Mountains), Hentii Mountains (Bogd Khaan, Bayan Ulaan, Toono Mountains) and Middle Khalkh (Baga Gazar Chuluu, Adaatsag, Ih Gazar Chuluu, Choiryn Bogd, Ih Sansar, Darkhan and Yazaar Mountains) and Khalkh River, Khyangan Mountain, Trans-Altai (Atas Bogd and Tsagaan Bogd Mountains), Alashani (Noyon and Tost Mountains) and Delgerkhaan Uul during altitudinal movements (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Bräunlich & Steudtner, 2008; Nyambayar & Tseveenmyadag, 2009).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding pairs nest in overgrown mountain thickets and scrub (*Juniperus* spp.) on dry, rocky slopes in alpine and subalpine in high mountains (Bold *et al.*, 2005; Gombobaatar, 2012). The female builds the nest in scrub like junipers, rock crevices, under rocks and vegetation, and in small trees 1-2 m high. The nest is a bulky cup of plant stems and dried grasses lined with hairs, wool, cashmere, and feathers. The female lays 3-5 eggs of glossy very pale blue colour without markings. The eggs are incubated by the female alone for 10-12 days. Both sexes feed young in the nest for 10-15 days. According to del Hoyo *et al.* (2005), the female may build a second nest when fledgling still dependent. Both adults feed the young mainly on invertebrates and seeds. In breeding season both adults and young feed on flies (Diptera), bugs, spiders (Araneae), beetles (Coleoptera) and small terrestrial snails. In winter they feed on seeds and berries of various plants. In winter and during seasonal movements, they occur in rocky mountains with tall bushes and scrub, areas with cliffs of dense bushes in mountain valleys, forest steppe, steppe and desert steppe. Small flocks of 5-11 individuals forage in bushes, under scrub, or on the ground. By late March-mid-April, they ascend to breeding sites in high mountains. During the seasonal movement, they occur in open steppe with rocks and cliffs with bushes.

Habitat Type: 1. Forest (edges of 1.4. during seasonal movements); 4. Grassland (4.4. Temperate during seasonal movements); 5. Wetlands (inland) (near 5.10., 5.11. During seasonal movements and feeding); 6. Rocky areas; 8. Desert (with rocks and cliffs 8.2. during seasonal movements); 11. Artificial – Terrestrial (11.3., 11.4. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.3. Extraction- 1.3.1. Mining /mining activities including gold and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2.

Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning both adults and young/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010), Eurasian Hobby and Eurasian Sparrow Hawk during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

409. Scientific Name: *Prunella atrogularis*

Species Authority: (Brandt, 1844)

Common Names: Black-throated Accentor (English), Kharomruut khairuuldai or khar omruut khairuuldai (Mongolian)

Subspecies in Mongolia: *P. a. huttoni* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2005) for further details)

Synonyms: *Accentor atrogularis* (Brandt, 1844)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is threatened by temperature extremes and is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: France; Germany; Sweden; Finland; Russian Federation; Israel; Islamic Republic of Iran; Kazakhstan; Kuwait; Oman; Turkmenistan; Uzbekistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia.

Regional Distribution: This species breeds in Khovd and Yolt River valleys (Mongol-Altai Mountain Range). It has been recorded in Great Lakes Depression migration (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003).

Population: The global population consists of 19,000 - 150,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant, possibly a partial migrant. Most breeding and migrating individuals arrive in breeding and migrating sites by late April-early May. In breeding period, birds occur in low, dense and thick scrub like *Juniperus* spp. in subalpine zones. Breeding ecology is poorly known in the country. Female builds own nest in trees, dense thickets and shrubs less than 3 m high in high mountains (Gombobaatar, 2012). The nest is a bulky cup made of twigs, grasses, and stems of plants, lined with fine grasses, hairs, and wool. The female lays 3-5 eggs of pale blue colour without markings. The female incubates the eggs alone for 11-14 days. Both adults feed young on insects (beetles, bugs, springtails, mites) and other arthropods (spiders), worms, and snails. The young fledge at 11-14 days (del Hoyo *et al.*, 2005). After the breeding season, both adults and young remain near breeding sites. On migration, individuals or small groups of 5-8 individuals forage in bushes and on the ground. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 4. Grassland (4.4. Temperate during seasonal movements); 5. Wetlands (inland) (near 5.10., 5.11. During seasonal movements and feeding); 6. Rocky areas.

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. Bycatch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning both adults and young on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding period/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrow Hawk during seasonal movements/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism / construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Approximately 20.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Prunellidae

410. Scientific Name: *Prunella koslowi*

Species Authority: (Przewalski, 1887)

Common Names: Mongolian Accentor or Kozlow's Accentor (English), Kozlovyn khairuuldai (Mongolian)

Synonyms: *Accentor koslowi* (Przewalski, 1887)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is threatened by temperature extremes and is subject

to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: T.Witcher (ZSL, UK), B.Delgermaa (EMPAA & MOS, Mongolia), Z.Uuganbaatar (NUM, Mongolia), P. Gankhuyag (WSCC, Mongolia), and B.Mungunbagana (MAS, Mongolia).

Global Distribution: China and Mongolia.

Regional Distribution: This species breeds in the Great Lakes Depression, north-western Khasagt Khaikhan Mountain to Southern Khangai Plateau, Valley of the Lakes, north-east to Khoolt mountain (20 km south from Arvaiheer) (Khangai Mountain Range), across Gurvansaikhan Mountain (Gobi-Altai Mountain Range) to Dalanzadgad town. It is also recorded in Khovd town (W Mongolia) and Khalkh River (Sumber sum of Dornod province) during the non-breeding period (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Busching, 2004; Boldbaatar, 2005; Nyambayar & Tseveenmyadag, 2009).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding period is late May-mid-June. Breeding pairs build their nest in thickets, juniper (*Juniperus* spp.), Caragana (*Caragana* sp.), other bushes and scrub in high mountain valleys and slopes (Gombobaatar, 2012). The nest is a bulky cup made of twigs, grasses, and stems of plants, lined with fine grasses, hairs, and wool. Female lays 4-5 eggs of very pale blue, or azure blue colour without markings. The female incubates the eggs alone for 11-14? days. Both adults feed young on insects such as beetles, flies and other arthropods including spiders, and worms. They forage on the ground in bushes and scrub. The young fledge possibly at 12-14? days. After the breeding season, families remain together and feed on invertebrates and seeds in open areas. In winter and during seasonal movements, they descend to lake and river valleys with bushes and scrub, mountain valleys and hillsides of high mountains. Groups of 6-30 individuals forage on the ground for seeds and fruits of various plants.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration); 12. Artificial – Aquatic (edges and shores of 12.2., 12.6., 12.9. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought. Sheep and goats destroy their nests with eggs and chicks in breeding season/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species;/ 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*), is a cause of individual mortality in autumn /; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance;/ 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the nest early spring;/ 8. Changes in native species dynamics- 8.2. Predators /predators such as Grey Wolf (*Canis lupus*), Red Fox (*Vulpes vulpes*), Saker Falcon in breeding and non-

breeding seasons/, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport of cars and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 13.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

411. Scientific Name: *Dendronanthus indicus*

Species Authority: (Gmelin, 1789)

Common Names: Forest Wagtail (English), Modny tsegtsgii or modny tsögtsgii (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Russian Federation, Oman, Pakistan, India, Maldives, China, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: H. Bormuth, H.-G. and Folz, W. Rathmayer, German birders observed one adult bird at the "Gobi Camp" near Dalanzadgad of Ömnögobi province on 14 June 2000 (H. Bormuth pers. comm.). Sh.Boldbaatar (MAS) observed a single bird at the Juulchin Gobi tourist camp in Ömnögobi province in June, 2002 (Boldbaatar, 2002).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a vagrant. Late passage migrants were accidentally in Gobi Desert recorded in June. There are several personal communications about this species that recorded in open forest areas with bushes and deciduous trees in upper Terelj River of Hentii Mountain in May. They may occur in planted trees in Gobi Desert on migration.

Habitat Type: Potential habitats are 1. Forest (1.4. on migration); 3. Shrub-land (3.4. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /habitat degradation by overgrazing of livestock/-1.3.3. Wood - 1.3.3.1. Small scale subsistence - 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting / logging for local fuel use and constructing materials/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings in forested areas/, 1.7. Fires /forest fires may burn feeding habitats on migration/; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from

industry, transport and local herders/; 8. Changes in native species dynamics- 8.2. Predators /potential predators -Saker Falcon, Northern Goshawk and Eurasian Sparrow Hawk/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, the species migrates through some protected areas and Important Bird Areas in the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

412. Scientific Name: *Motacilla alba*

Species Authority: Linnaeus, 1758

Common Names: White Wagtail (English), Höh tsegtsgii (Mongolian)

Subspecies in Mongolia: *M. a. leucopsis*, *M. a. baicalensis*, *M. a. ocularis*, *M. a. personata* (see Howard & Moore (1994); Dawaa *et al.* (1994); Alström and Mild (2003); del Hoyo *et al.* (2004); Brazil (2009) for further details).

Synonyms: *Motacilla lugens* Gloger, 1829

Taxonomical Notes: *Motacilla alba* (Sibley & Monroe, 1990&1993) was split by Sangster *et al.* (1998) into *M. alba*, *M. alboides*, *M. baicalensis*, *M. leucopsis*, *M. ocularis*, *M. personata* and *M. subpersonata*, but this treatment is not followed by the BirdLife Taxonomic Working Group because no vocal, morphological or phylogenetic evidence is provided by Sangster *et al.* (1998) (BirdLife International, 2010). Alström *et al.* (2003) notes that all contiguously distributed subspecies of *M. alba* interbreed. According to several major publications on taxonomy of birds in Mongolia, Masked Wagtail or Pied Wagtail *Motacilla personata* Gould, 1885 (Melzen tsegtsgii in Mongolian) is a separate species (Stepanyan, 1978, 1990 & 2003; Bold *et al.*, 2007; Gombobaatar, 2009). We followed the bird taxonomy of BirdLife International (2010) for several reasons. Alström *et al.* (2003) mention that all subspecies interbreed in 'hybrid zones'. Also, if we consider Masked Wagtail *Motacilla personata* a separate species, it would seem illogical to deny the other subspecies full species status, due to morphological features and slight ecological differences.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, logging, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Mexico, Anguilla, Saint Kitts and Nevis, Montserrat, Antigua and Barbuda, Guadeloupe, Trinidad and Tobago, Dominica, Saint Vincent and the Grenadines, Martinique, Saint Lucia, Barbados, Saint Pierre and Miquelon, Greenland, Iceland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian

Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Northern Mariana Islands.

Regional Distribution: This species breeds in Kharkhira and Turgen Mountains (Mongol-Altai Mountain Range); northern Ih Bogd and W Gobi-Altai mountain massif to Tonkhil sum (Gobi-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, and Torkholig Rivers (Northern Uvs Depression); Khar-Us, Khar Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); Khangai, Hövsgöl and Hentii Mountain Ranges (except for high altitudes and dense taiga forest); Orkhon-Selenge River basins; Herlen-Ulz River basins; Buir Lake-Khalkh River-Khyangan region and Bulgan River (Baruunkhurai Depression). It migrates through the breeding areas, open habitats and lake and river valleys in Great Lakes Depression, Middle Khalkh Steppe, Eastern Mongolian Plain, Valley of the Lakes and the Gobi (Trans-Altai, Northern and Eastern Gobi) (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Busching, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Regional Distribution and habitats of Masked Wagtail: Approximately 12.2% of the species' range in Mongolia occurs within protected areas. It breeds in mountain meadows, river valleys with rocks in high mountains in Siilhem, Kharkhira and Turgen Mountains (Mongol-Altai Mountain Range), east to Tonkhil and Tögrög sum, Tes River valley, SE Khangai Mountain and Zavkhan Desert Steppe Depression. It migrates through the breeding areas and Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, S Khangai Mountain Range, Valley of the Lakes, Baruunkhurai Depression and Gobi (Trans-Altai and Northern Gobi) (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Boldbaatar, 2008).

Population: The global population consists of 50,000,000 - 500,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most non-breeding and breeding individuals arrive in breeding and summering sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. Breeding sites are open habitats with crevices of rocks, cliffs, boulders and holes of trees and man-made substrates including pipes, roofs of buildings and cattle shelters in wetlands, on shores of rivers, lakes, ponds in high mountains, mountain forest, forest steppe, mountain steppe, desert steppe, river valleys, villages and towns (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs nest in a cavity or hole in a great variety of sites: walls, buildings, pipes and drains, banks, cliffs, thatched roofs, trees, or old nests of other birds, from ground level upwards. The nest is built by the female. It is a cup of stems, twigs, leaves, roots and moss, lined with hair, feathers and wool. The female usually lays 5-6, occasionally 3-7 eggs of glossy grey or bluish-white colour with grey-brown and grey spots, occasionally with brown blotches, but predominantly of grey type. Both sexes, but largely the female, incubate the eggs for 12-14 days. Both parents care for and feed young on terrestrial and aquatic arthropods and their larvae caught on the ground. The young leave the nest at 13-16 days. After the breeding season, they form flocks consisting of 4-150 individuals and migrate through habitats such as lake shores, river banks, edges of wetlands, and open steppe areas from high mountains to oases in Gobi Desert. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.9. on feeding in breeding and on migration, 5.10.-5.17. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration); 12. Artificial – Aquatic (12.2., 12.6., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in marshes, meadows and valleys of streams, springs and rivers with tall vegetated areas overgrazed by livestock which destroy nests containing eggs and young chicks/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/1.3.3. Wood - 1.3.3.1. Small scale subsistence - 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging for local fuel use and construction materials are a main threat to the species/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires burn bushes and grasses in breeding sites, also eggs and chicks/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /people occasionally shoot this species for souvenirs/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./-4.1.1.5. Poisoning /in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) and insecticide against Siberian Moth and other forest insects /, 4.2. Collision-4.2.1. Pylon and building collision /collision is a potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators / Eastern Marsh-harrier, Saker Falcon, Eurasian Badger (*Meles meles*) prey upon eggs and young chicks/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

413. Scientific Name: *Motacilla citreola*

Species Authority: Pallas, 1776

Common Names: Citrine Wagtail or Yellow-headed Wagtail (English), Sharturuut tsegtsgii or shar turuut tsegtsgii (Mongolian)

Subspecies in Mongolia: *M. c. citreola* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); Alström and Mild (2003); del Hoyo *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, flooding, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, Iceland, Senegal, Morocco, Ireland, Spain, United Kingdom, France, Belgium, Netherlands, Norway, Germany, Switzerland, Italy, Denmark, Austria, Sweden, Czech Republic, Poland, South Africa, Hungary, Slovakia, Serbia, Greece, Romania, Finland, Latvia, Lithuania, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Russian Federation, Cyprus, Malawi, Ethiopia, Israel,

Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Yemen, Armenia, Islamic Republic of Iran, Kazakhstan, Kuwait, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Sri Lanka, Nepal, Mongolia, Bhutan, Myanmar, Thailand, Lao People's Democratic Republic, Viet Nam, Singapore, Australia, Hong Kong, Taiwan, Republic of Korea, Japan.

Regional Distribution: This species breeds in Altai Tavan Bogd massif, Tolbo Lake, Mönh Khaikhan (up to 2,900 m asl), south-east to Ihes Lake and Mösön Turuut River (Mongol-Altai Mountain Range); Tes River valley, Northern Uvs Depression, Khar-Uus, Khar, and Dörgön Lakes and the delta of Khovd River, Zereg Depression and Shargyn Gobi (Great Lakes Depression); Zavkhan and Hungui River valley (Zavkhan Desert Steppe Depression); from lowland to subalpine zone up to 2,700 m asl (Otgontenger Mountain), Tamir, Khanui and upper Orkhon Rivers and Sangiin Dalai, Ögii Lakes, Tui and Baidrag Rivers and many small lakes (Southern Khangai Plateau); Terhiin Tsagaan, Telmen, and Khar Lakes with wide shores and Ider and Chuluut Rivers, and Tarvagatai-Bulnai Mountains (Khangai Mountain Range); Hövsgöl Lake and Darkhad Depression (Hövsgöl Mountain Range); lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai and Herten Rivers (Hentii Mountain Range); Middle Khalkh Steppe; Ulz River, Mongol Daguur Steppe; Khalkh, Degee, Nömrög Rivers, and Buir and Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan, Uyench and Bodonch Rivers (Baruunkhurai Depression). It migrates through the breeding areas, open habitats and lake and river valleys in Gobi-Altai Mountain Range, small lakes and oases in Trans-Altai, Northern and Eastern Gobi (Kozlova, 1930; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Busching, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 3,000,000 - 30,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding individuals arrive in breeding and summering sites by late April-early May. Breeding season continues from May-July. Breeding habitats area wet meadows with hummocks, grassy swamps and marshes, open bogs in forest with low cover and short bushes, and willows, and soggy river banks in high mountains, mountain forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build own nest on the ground in a hollow or bank, sheltered by overhanging trees or shrubs, or stone. The nest cup is built of plant stems and moss, lined with leaves and hair and feathers. The female usually lays 4-5, rarely 6 eggs of slightly glossy pale grey or buffish ground colour with greyish-brown and dull grey speckles, or light brown mottles. Both parents, mostly female, incubate the eggs and feed young on terrestrial and aquatic insects and their larvae. Breeding ecology is similar to Yellow-Wagtail. They migrate in small to large flocks consisting of 5-60 individuals and occur on lake shores, river banks and edges of wetlands by late August-early September, depending on food availability and weather conditions. The flocks join with Yellow Wagtail flocks in the steppe on migration.

Habitat Type: 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.9. on feeding in breeding and on migration, 5.10.-5.17. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /livestock gather in marshy and boggy areas in different types of steppe in summer for drinking and grazing; nests may be destroyed by livestock/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires burn bushes and grasses in breeding sites, also eggs and chicks/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /people occasionally shoot this species for souvenirs/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /in the steppe, this species

may feed on grain mixed with Bromadilone (rodenticide) and insecticide against Siberian Moth and other forest insects /, 4.2. Collision-4.2.1. Pylon and building collision /collision is a potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7.Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /Eastern Marsh-harrier, Saker Falcon, Sparrow Hawks, Northern Goshawk, and Eurasian Badger (*Meles meles*) prey upon eggs and young chicks/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

414. Scientific Name: *Motacilla flava*

Species Authority: Linnaeus, 1758

Common Names: Yellow Wagtail (English), Shar tsegtsgii (Mongolian)

Subspecies in Mongolia: South Siberian Yellow Wagtail (*M. f. angarensis*),–Southeast Siberian Yellow Wagtail (*M. f. macronyx*), White-headed Yellow Wagtail (*M. f. leucocephala*), Sykes' Wagtail (*M. f. beema*) (see Howard & Moore (1994); Dawaa *et al.* (1994); Alström and Mild (2003); del Hoyo *et al.* (2004); Brazil (2009) for further details).

Taxonomical Notes: Several authors, including Stepanyan (1978, 1990 and 2003), Bold *et al.* (2007), Gombobaatar (2009) have considered the taxon a separate species based on morphological and ecological characters. *Motacilla flava* (Sibley & Monroe, 1990&1993) was split by AOU (2004) into *M. flava* and *M. tschutschuensis*, and by Sangster *et al.* (1998) into *M. flava*, *M. cinereocapilla*, *M. feldegg*, *flavissima*, *M. iberiae*, *M. leucocephala*, *M. lutea*, *M. simillima*, *M. taivana*, *M. tschutschuensis* and *M. thunbergi*. Pavlova *et al.* (2003) identified three clades within *M. flava* with *M. citreola* nested within these, while Alström *et al.* (2003) identified two clades within *M. flava*. The BirdLife Taxonomic Working Group find these treatments counter-intuitive and mutually contradictory and follow the treatment of Tyler (2004) in recognising *flava* as one large polytypic species pending a more coherent and complete analysis of the molecular and morphological evidence (BirdLife International, 2010). Due to the lack of detailed information on taxonomy for separation of the subspecies, we follow the BirdLife Taxonomic Working Group, recent publications on molecular taxonomy of the subspecies, and IUCN rules in considering this a subspecies of Yellow Wagtail.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, reed cutting, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SFP-NUM, Mongolia), M.Munkhjargal (SFP-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria,

Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Congo, the Democratic Republic of the Congo, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Northern Mariana Islands, Micronesia.

Regional Distribution: This species breeds from Achit Lake south to Shargyn Gobi and Valley of the Lakes (Mongol-Altai Mountain Range and the valley); from Uvs Lake, Tes, Nariin, Torkholig and other rivers to Shargyn Gobi (Great Lakes Depression); most areas in Khangai, Hövsgöl and Hentii Mountain Ranges (except for mountain dense forest); Orkhon-Selenge River basins; Herlen-Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Buir Lake-Khalkh River-Khyangan region; Gobi-Altai Mountain Range; Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes); Bulgan, Bodonch, and Uyench River valleys (Baruunkhurai Depression). It migrates through the breeding areas and wetlands in Trans-Altai, Northern and Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Sumiya, 1991; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Regional Distribution of Green-headed Wagtail. Approximately 15.7% of Green-headed Wagtail's range in Mongolia occurs within protected areas. Global distribution is S Sakhalin to N Hokkaido and winters Myanmar to Taiwan, S to Wallace. In Mongolia, this subspecies passes through eastern Hentii Mountain Range (Böhög River) and Khar-Us Lake (Fomin & Bold, 1991; Dawaa *et al.*, 1994). In August, 2004, two birds were seen in Döröö Lake and one bird in Höh Lake, Ereentsav (Chuluunkhoroot) sum of Dornod province (Badley *et al.*, 2005). S.Gombobaatar photographed total of 5 birds at western and southern shores of Chukh Lake, Dashbalbar sum, Dornod province on 14 May, 2009 and six birds at south-western and western shores of Höh Lake, Ereentsav sum, Dornod province on 16 May, 2009 (Gombobaatar, 2009). It possibly migrates through lake shores in the Valley of Ulz and Khalkh Rivers.

Population: The global population consists of 50,000,000 - 150,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding, migrating and passage migrant individuals arrive in breeding and summering sites by late April-early May. Breeding season continues from May-July. Breeding habitats are meadows, grassy swamps, marshes with reed beds, and forest bogs in high mountains, the edges of mountain taiga forest, forest steppe, lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build their nest on the ground. The nest is in a hollow, or in thick herbage, or under leaf of low-growing plant. Its nest cup built into a hollow, of grasses, plant stems, and roots; thickly lined with hair, and occasionally fur or wool. The female usually lays 5-6, rarely 7 eggs of glossy ground colour with pale buff or greyish, heavily and finely speckles and dark hair-streaks present. Both adults, but predominantly the female incubates the eggs for 12-14 days. Both parents care for and feed young on terrestrial and aquatic insects and their larvae. The young leave the nest at 10-13 days and can fly at c. 17 days. They form from small to large flocks consisting of 4-200 individuals on migration. In non-breeding period, they stay along lake shores, river banks, edges of shallow water areas of various wetlands, near cattle shelters and buildings in the steppe. This species leaves its breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.9. on feeding in breeding and on migration, 5.10.-5.17. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration); 12. Artificial – Aquatic (12.2., 12.6., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in marshes, meadows and valleys of streams, springs and rivers with tall vegetated areas overgrazed by livestock which destroy nests containing eggs and young chicks/, 1.3. Extraction-1.3.1. Mining / nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires burn bushes and grasses in breeding sites, also eggs and chicks/; 4. Accidental mortality- 4.1.1.5. Poisoning /in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) and insecticide against Siberian Moth and other forest insects /, 4.2. Collision-4.2.1. Pylon and building collision /collision is a potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7.Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /Eastern Marsh-harrier, Saker Falcon, Eurasian Badger (*Meles meles*), Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*) and Halys Viper (*Gloydus halys*) prey upon eggs and young chicks/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

415. Scientific Name: *Motacilla cinerea*

Species Authority: Tunstall, 1771

Common Names: Grey Wagtail (English), Uulyn tsegtsgii (Mongolian)

Subspecies in Mongolia: *M. c. melanope*, *M. c. robusta* (see Howard & Moore (1994); Dawaa *et al.* (1994); del Hoyo *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, flooding, logging, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Greenland, Iceland, Senegal, Mauritania, Guinea-Bissau, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Niger, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Sweden, Namibia, Czech Republic, Slovenia, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania,

the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Egypt, Zimbabwe, Turkey, Russian Federation, Rwanda, Tanzania, Uganda, Cyprus, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Christmas Island, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau, Guam, Micronesia.

Regional Distribution: This species breeds in Siilhem, Kharkhiraa and Turgen Mountains, Mönh Khairkhan (up to 2,500 m asl), Ih Bogd and Gurvansaikhan (Gobi-Altai Mountain Range); Uvs Lake and the delta of Tes Nariin, Torkholig Rivers and Jargalant Khairkhan Mountain (Great Lakes Depression); Southern Khangai Plateau; Khan Höhii and Tarvagatai-Bulnai Mountains; Hövsgöl Lake region and Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins and Hentii Mountain Range (up to 2,100 m asl). It migrates through the breeding areas and lake and river valleys in Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression and the Gobi (Trans-Altai, Northern and Eastern Gobi) (Kozlova, 1930; Stubbe *et al.*, 1993; Erdenebat, 1989; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Busching, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 10,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 18,600,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding individuals arrive in breeding and summering sites by late April-early May. Breeding season continues from May-July. Breeding habitats are tall vegetated banks of mountain rivers with rocks, freshwater lake shores with trees, and river valleys in the forest edges in high mountains, mountain taiga forest, forest steppe and mountain river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding pairs build their nest on the ground, in a hollow or crevice of a bank or cliff by running water, or among the roots of waterside trees. The nest cup is built of roots, grasses and moss, lined with finer grasses, hairs, and sometimes feathers. The female usually lays 4-6, rarely 3-7 eggs of glossy creamy or greyish-buff ground colour with greyish-buff or pale grayish mottles and dark hair-streaks. Both parents care for the young and feed them on terrestrial and aquatic insects and their larvae caught on the ground. The young leave the nest at 11-13 days and can fly at c. 17 days. Non-breeding and breeding birds form flocks consisting of 6-30 individuals on migration and migrate through lake shores, river banks, and edges of various wetlands. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.1.-5.9. on feeding in breeding and on migration, 5.10.-5.17. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. on migration); 12. Artificial – Aquatic (12.2., 12.6., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in marshes, meadows and valleys of streams, springs and rivers with tall vegetated areas overgrazed by livestock which destroy nests containing eggs and young chicks/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/1.3.3. Wood - 1.3.3.1. Small scale subsistence - 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging for local fuel use and construction materials are a main threat to the species/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires burn bushes and grasses in breeding sites, also eggs and chicks/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /people occasionally shoot this species for

souvenirs/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) and insecticide against Siberian Moth and other forest insects /, 4.2. Collision-4.2.1. Pylon and building collision /collision is a potential threat to the species on migration/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators / Eastern Marsh-harrier, Saker Falcon, Eurasian Badger (*Meles meles*) predate their eggs and young chicks/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

416. Scientific Name: *Anthus richardi*

Species Authority: Vieillot, 1818

Common Names: Richard's Pipit (English), Heeriin shiihnuuhei (Mongolian)

Subspecies in Mongolia: *A. r. richardi*, *A. r. centralasiae*, *A. r. dauricus* (see Howard & Moore (1994) and del Hoyo *et al.* (2004) for further details)

Synonyms: *Anthus novaeseelandiae* Gmelin, 1789

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Mauritania, Guinea, Morocco, Mali, Ireland, Portugal, Spain, Algeria, United Kingdom, France, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Libyan Arab Jamahiriya, Austria, Congo, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Chad, Poland, Malta, South Africa, Slovakia, Serbia, Botswana, Greece, Finland, Latvia, Sudan, Zambia, Bulgaria, Egypt, Zimbabwe, Turkey, Lesotho, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Swaziland, Cyprus, Malawi, Ethiopia, Kenya, Israel, Jordan, Lebanon, Somalia, Djibouti, Islamic Republic of Iran, Kazakhstan, Kuwait, Qatar, Oman, Afghanistan, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: This species breeds at Khovd River and Achit and Uureg Lakes, south to Tsetseg lake (Mongol-Altai Mountain Range); Böhmörön and Tes Rivers, south to Zereg Depression, Khar-Uus, Khar, Dörgön Lakes and the delta of Khovd River (Great Lakes Depression); Zavkhan and Hungui Rivers; Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine, dense taiga forest); Orkhon-Selenge River basins; Tuul, Terelj, Onon, Balj, Huder, and Bulnai Rivers (Hentii Mountain Range); Herlen- Ulz River basins; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Buir Lake-

Khalkh River-Khyangan region. It migrates through the breeding areas and valleys of Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes) and Bulgan, Uyench, Bodonch, and Bij rivers (Baruunkhurai Depression); Gurvansaikhan Mountain (Gobi-Altai Mountain Range), Northern, Eastern, Alashani Gobi and Zakhui, Zarman, and Zuun mod oases in Trans-Altai Gobi (Kozlova, 1930; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Busching, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding individuals arrive in breeding and summering sites by late April-early May. Breeding season continues from May-July. Breeding habitats are open semi-wet habitats on mountain slopes, edges of coniferous and mixed forests, mountain meadows and tall vegetated mountain valleys in high mountains, forest steppe, mountain steppe and lake and river valleys with shrubs and bushes (Sumiya&Skryabin, 1989; Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest a hollow lined with dried grasses and softer fine stems and hairs under grass tussocks. The female lays 3-6 eggs of glossy ground colour tinted grey, bluish green, or buffish brown colour with dark brown, black or reddish-brown blotches, speckles, and spots. Female incubates the eggs for 11-15 days. Both parents care for and feed young on insects and their larvae the ground and make short flights to catch flying insects. In late autumn and early spring, they feed on seeds of various plants. They migrate in pairs and flocks consisting of 6-20 individuals in the steppe. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (edge of 1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 5. Wetlands (5.3.-5.9., 5.13. on migration and feeding); 6. Rocky areas; 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration); 12. Artificial – Aquatic (12.6., 12.8., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in mountain slopes with tall grasses, meadows and valleys of streams, springs and rivers with tall vegetated areas overgrazed by livestock. The livestock destroy the nest containing eggs and young chicks/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation / construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires burn bushes and grasses in breeding sites, also eggs and chicks/; 4. Accidental mortality-4.1.1.5. Poisoning /seed-eating birds, including this species may feed on grain mixed with Bromadilone (rodenticide) and insecticide against Siberian Moth and other forest insects/, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars accidentally hit fledglings near breeding areas/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7.Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*), Halys Viper (*Gloydus halys*), and Eurasian Badger (*Meles meles*) prey upon eggs and young chicks. This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010)/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

417. Scientific Name: *Anthus campestris*

Species Authority: (Linnaeus, 1758)

Common Names: Tawny Pipit (English), Talyn shiihnuuhei (Mongolian)

Subspecies in Mongolia: *A. c. griseus*, *A. c. kastschenkoi* (see Alström and Mild (2003) and del Hoyo *et al.* (2004) for further details)

Synonyms: *Alauda campestris* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Iceland, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Morocco, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Gibraltar, France, Ghana, Togo, Niger, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Turkey, Moldova, Russian Federation, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Turkmenistan, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Bangladesh, Bhutan.

Regional Distribution: This species breeds at Tolbo, Achit, Uureg Lakes, from Khovd River (Khoton Lake) to southern Mönh Khairkhan Mountain, east to Khasagt Khairkhan and Taishir, northern Baruunkhurai (Bulgan, Uyench, and Bodonch River valleys) (Mongol-Altai Mountain Range); from Tes River valley and Northern Uvs Depression to Mongol-Altai, east to W Khangai Mountain Range; Orkhon-Selenge River valleys; W Hövsgöl Mountain Range. It migrates through the breeding areas and dry open habitats in Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine zone, taiga forest), Herlen-Ulz River basins, Middle Khalkh Steppe, Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression, Gobi-Altai Mountain Range and oases in Trans-Altai Gobi and through the Northern and Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Busching, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Boldbaatar, 2003, Boldbaatar, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 5,000,000 - 25,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding birds arrive in breeding and feeding sites by late April-early May, depending on weather conditions at breeding and wintering grounds. Breeding season continues from May-July. Breeding pairs build own

nest on the ground in arid open bare country, hillsides, Rocky areas, sparse scrub, and is sometimes found in forest meadows and edges, and sandy open ground (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is on the ground, in a hollow under a plant tuft. It is made by dry grasses, plants and roots and is lined with plant fibres and hair. The female usually lays 4-5, rarely 6 eggs of glossy ground colour with brown and purplish-grey spots and blotches. The eggs are incubated by the female alone or by both sexes at 13-14 days. Both parents care for and feed young on terrestrial invertebrates and their larvae (grasshoppers, dragonflies, butterflies, spiders, ants, flies, beetles and snails). The young leave nest at 12-14 days. They migrate singly and in small flocks in Mongolia. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions. On migration, individuals occur, or small numbers of 6-14 individuals, sometimes joining with Richard's and Blyth's Pipits in open steppe's lake shores and river banks.

Habitat Type: 3. Shrub-land (3.4.); 4. Grassland (4.4.); 5. Wetlands (5.3.-5.9., 5.13. on migration and feeding); 6. Rocky areas; 8. Desert (8.2. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in mountain slopes and arid areas with tall grasses and shrubs overgrazed by livestock which destroy nests containing eggs and young chicks/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/; 4. Accidental mortality- 4.1.2. Terrestrial-4.1.1.5. Poisoning /seed-eating birds, including in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) and insecticide against insects in forest steppe on migration/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to migrants/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators /potential predators are Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*), Halys Viper (*Gloydius halys*) and Eurasian Badger (*Meles meles*)/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./.

Conservation Measures: Approximately 6.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

418. Scientific Name: *Anthus godlewskii*

Species Authority: (Taczanowskii, 1876)

Common Names: Blyth's Pipit or Godlewski's Pipit (English), Godlevskiin shiihnuuhei (Mongolian)

Synonyms: *Agrodoma godlewskii* (Taczanowskii, 1876)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, fire, drought, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United Kingdom, France, Belgium, Netherlands, Finland, Russian Federation, Israel, Bahrain, United Arab Emirates, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Republic of Korea, Japan.

Regional Distribution: This species breeds at Kharkhira, Turgen Mountains, Mönh Khairkhan massif, east to Khasagt Khairkhan and Alag Khairkhan Mountain (Mongol-Altai Mountain Range); Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai Mountain Range); Tes and Khovd Rivers (Great Lakes Depression); Zavkhan and Hungui Rivers (Zavkhan Desert Steppe Depression); from Uliastai town to Khan Höhii, Tarvagatai and Bulnai Mountains; Tamir, Khanui and upper Orkhon Rivers (Khangai Mountain Range); Hövsgöl Lake and Eg River, Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins; Tuul, Terelj, Onon, and Balj Rivers (Hentii Mountain Range); Herlen-Ulz River basins; Middle Khalkh and Mongol Daguur Steppe; Buir Lake-Khalkh River-Khyangan region. It migrates through the breeding areas and open habitats in the Eastern Mongolian Plain, Valley of the Lakes, Bulgan River valley (Baruunkhurai Depression) and the Gobi (Trans-Altai, Alashani, Northern and Eastern Gobi) (Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Busching, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding birds and passage migrants arrive in breeding sites and feeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are tall and dense grass, small shrubs, and tussocks in open semi-dry habitats on mountain slopes, mountain meadows, mixed forest edges, meadows in river valleys and wheat fields in high mountains, forest steppe, mountain steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). Parents build their own nest on the ground. Strongly territorial, Blyth's Pipit will defend territorial boundaries in the area used for feeding and nesting. During display, Blyth's pipit flies rapidly up into the air, rising to between 10 and 30 m high, and will hover and sing loudly before parachuting steeply back down to the ground with its wings outstretched (del Hoyo *et al.*, 2004). The nest is a hollow lined with dried grasses and softer fine stems and hairs under grass tussocks. Female lays 3-5, occasionally 6 eggs of glossy ground colour, or bluish green colour with dark brown, or reddish-brown blotches, speckles, and spots. The female incubates the eggs for 12-14 days. Both parents care for and feed young on small invertebrates and their larvae. In non-breeding period, they feed on seeds of various plants, foraging on the ground and picking up food items as it walks. A remarkable long-distance migrant, Blyth's Pipit undertakes an impressive journey each year from its breeding grounds in Russia and Mongolia, migrating singly or in small flocks to its wintering grounds on the Indian subcontinent, where it arrives in early September (del Hoyo *et al.*, 2004). They form flocks consisting of 5-100 individuals in the steppe. They leave their breeding site for wintering grounds by late August-early September, depending on breeding success, food and weather conditions.

Habitat Type: 1. Forest (edge of 1.4.); 3. Shrub-land (3.4.); 4. Grassland (4.4.); 5. Wetlands (5.3.-5.9., 5.13. on migration and feeding); 6. Rocky areas; 8. Desert (8.2. on migration); 11. Artificial – Terrestrial (11.3., 11.4. on migration); 12. Artificial – Aquatic (12.6., 12.8., 12.9. on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding pairs nest in mountain slopes with tall grasses, meadows and valleys of streams, springs and rivers with tall vegetated areas overgrazed by livestock which destroy nests containing eggs and young chicks/, 1.3. Extraction-1.3.1. Mining /nesting habitats are affected by gold and other mining activities/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation / construction of buildings for industrial purposes, tourist resorts, and other buildings at breeding sites/, 1.7. Fires /steppe fires burn bushes and grasses in breeding sites, also eggs and chicks/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /people occasionally shoot this species for souvenirs/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1./ -4.1.1.5. Poisoning /seed-eating birds, including in the steppe, this species may feed on grain mixed with Bromadilone (rodenticide) and insecticide against Siberian Moth and other forest

insects /, 4.2. Collision-4.2.1. Pylon and building collision /collided and electrocuted birds were found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/ -4.2.2. Vehicle collision /fast driving cars accidentally hit fledglings near breeding areas/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /associated with habitat loss and degradation caused by drought/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7.Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./, 7.3. Temperature extremes /overcooling of eggs and young chicks/; 8. Changes in native species dynamics- 8.2. Predators -Red Fox (*Vulpes vulpes*), Corsac Fox (*Vulpes corsac*), Halys Viper (*Gloydus halys*) and Eurasian Badger (*Meles meles*) prey upon eggs and young chicks. This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uganbayar & Gombobaatar, 2010)/, 8.3. Prey and food base /lack of food base/; 10. Human disturbance-10.1. Recreation and tourism /due to construction of private houses, resorts, and tourist camps in breeding and migrating sites/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

419. Scientific Name: *Anthus trivialis*

Species Authority: (Linnaeus, 1758)

Common Names: Tree Pipit (English), Oin shiihnuuhei (Mongolian)

Subspecies in Mongolia: *A. t. schlueteri*, *A. t. trivialis* (see Dawaa *et al.* (1994); Alström and Mild (2003); del Hoyo *et al.* (2004) for further details)

Synonyms: *Alauda trivialis* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because although it is not currently threatened, it is likely to undergo significant habitat loss and degradation through steppe fires, overgrazing and drought. It is also under threat from poaching. Further research is needed into population size, migration patterns and disease transmission between countries of occurrence.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SF-NUM, Mongolia), M.Munkhjargal (SF-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, Iceland, Cape Verde, Senegal, Western Sahara, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Andorra, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Equatorial Guinea, Austria, Svalbard and Jan Mayen, the Democratic Republic of the Congo, Sweden, Angola, Namibia, Czech Republic, Slovenia, Chad, Poland, Malta, Croatia, Central African Republic, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Botswana, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Lithuania, Sudan, Zambia, Ukraine, Bulgaria, Estonia, Belarus, Egypt, Zimbabwe, Turkey, Moldova, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Mozambique, Malawi, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Georgia, Somalia, Djibouti, Yemen, Comoros, Armenia, Islamic Republic of Iran, Azerbaijan,

Kazakhstan, Kuwait, Oman, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, Maldives, China, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Republic of Korea, Japan.

Regional Distribution: This species breeds at Khovd River, Kharkhira and Turgen Mountains; from Khovd (Khoton, Khorgon, Dayan Lakes) to Bulgan River (Mongol-Altai Mountain Range) and Ih Bogd (Gobi-Altai Mountain Range); from Hövsgöl through Northern Khangai (Tarvagatai-Bulnai range) to Khan Höhii Mountain; Orkhon-Selenge River basins, south to Bogd Khaan Mountain (Southern Hentii); from Hentii Mountain east to Herlen, Onon and Balj Rivers. It migrates through the breeding areas and open dry habitats in Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for alpine zone, dense taiga forest), Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes and the Gobi (Dzungar, Trans-Altai, Alashani, SW of Eastern Gobi (Kozlova, 1930; Sergelen, 1986; Erdenebat, 1989; Sumiya & Skryabin, 1989, Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Busching, 2003; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 150,000,000 - 500,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in breeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are scattered trees, cleared or burnt-over woodland, woodland edge, sometimes extending into open woodland. This species builds own well-sheltered nest on the ground, under dead tree, dense grass, branches and behind large alive trees along the edges of mixed forest and river valleys with deciduous forest and mountain steppe with patchy woodland (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a large cup of drier grasses, with some moss, particularly at the base, lined with fine grass, plant fibres and hair. The female incubates usually 4-6 eggs of glossy grey, bluish green or buffish ground colors with dark brown, olive, black or reddish-brown speckles, spots, blotches or streaks. The eggs are incubated by the female alone for 12-14 days. Both parents care for and feed young on terrestrial invertebrates and their larvae and seed of various plants in winter. The young leave nest at 12-13 days. They migrate in pairs or small flocks consisting of 6-20 birds in the steppe. On migration they perch and rest on wires of electric and telegraph lines. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.4. on migration and feeding); 4. Grassland (4.4. on migration); 5. Wetlands (edges of 5.3., 5.4., 5.9. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2., 8.3.); 11. Artificial - Terrestrial (11.3., 11.4., 11.5. only on migration); 12. Artificial - Aquatic (near 12.6., 12.9. only on migration).

Dominant Threats:

1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic: Breeding habitats such as forest edges and dense forest were overgrazed by livestock in spring and summer. Livestock destroy the nest containing eggs and young chicks in breeding season.

1.3. Extraction-1.3.1. Mining: Gold and other mining activities have been affecting this species through habitat changes and destruction both breeding and feeding sites.

1.3.3. Wood - 1.3.3.1. Small scale subsistence - 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting: Logging for local fuel use and construction materials are a main threat to the species to shift and move to other areas or to breed in low success.

1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation: Tourist camps, resorts, and other construction activities such as accommodation for gold mining company workers at Hentii and Khangai Mountain breeding sites are threatening to the species.

1.7. Fires: Forest fires burn breeding habitats in autumn and spring.

4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting: See 3.5.1.

4.1.1.5. Poisoning: Mongolian government uses the insecticide against Siberian Moth and other forest insects in forested areas last few years. The chemicals are a cause of poisoning of the species through the food chain in breeding and feeding sites.

4.2. Collision-4.2.1. Pylon and building collision: A mortality caused by collision and electrocution has not reported yet. However, it is one of the potential threats to the species on migration.

5. Persecution- 5.1. Pest control: See 4.1.1.5.

6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming: Coniferous and deciduous forests that play as important role to the species have been drying up due to drought apparently caused by global warming.

7. Natural disasters-7.1. Drought: See 1.1.4.1., 6.1.1.

7.3. Temperature extremes: Overcooling of eggs and young chicks is also a potential threat to the species.

8. Changes in native species dynamics- 8.2. Predators: Eurasian Sparrow Hawk, and Northern Goshawk prey on both adults and young in breeding site. Saker Falcon and Eurasian Hobby hunt for the species on migration.

8.3. Prey and food base: A lack of food due to insecticide use (see 4.1.1.5.) is a critical threat to the species.

10. Human disturbance- 10.1. Recreation and tourism: Due to construction of private houses and resorts, and live the family with livestock in high numbers in breeding site, number of breeding pairs has been decreasing for last few years.

Conservation Measures: Approximately 7.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

420. Scientific Name: *Anthus hodgsoni*

Species Authority: Richmond, 1907

Common Names: Olive-backed Pipit or Indian Tree Pipit (English), Börtöt shiihnuuhei (Mongolian)

Subspecies in Mongolia: *A. h. yunnanensis* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000); Alström and Mild (2003); del Hoyo *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, forest fire, logging, drought, flooding, human disturbance and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SFP-NUM, Mongolia), M.Munkhjargal (SFP-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, Mexico, Ireland, Portugal, Spain, United Kingdom, Faroe Islands, France, Netherlands, Norway, Germany, Denmark, Sweden, Poland, Malta, Finland, Turkey, Russian Federation, Israel, Jordan, Islamic Republic of Iran, Kazakhstan, Kuwait, Bahrain, Oman, Afghanistan, Pakistan, India, China, Sri Lanka, Nepal, Mongolia, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: In Mongolia, this species breeds at Khangai, Hövsgöl and Hentii Mountain Ranges (except for dry open habitats without trees); forested areas in Orkhon-Selenge River basins; Tes River valley (Great Lakes Depression). It migrates through the breeding areas and all natural zones and belts in Mongol-Altai and Gobi-Altai Mountain Ranges (except for alpine, subalpine zones and wet meadows), Great Lakes Depression, Darkhad Depression, Herlen-Ulz River basins, Middle Khalkh Steppe

and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh Gol-Ih Khyangan region, Valley of the Lakes, Baruunkhurai Depression and the Gobi (Trans-Altai, Northern and SW of Eastern Gobi) (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding birds arrive in breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs build own nest on the ground, under dead tree, trunk, branches, and dense grassy areas in deciduous and mixed forests of mountain forest taiga, forest steppe, and river valleys, rarely on mountain steppe with patchy woodland (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is well concealed by shrubs, grasses, and fallen twigs. It is a bulky and rather compact cup of dried grass, with lining of hair and moss. The female lays 3-5 eggs of glossy grey, bluish green, olive brown, or buffish ground colour with dark brown, black or reddish-brown speckles, spots, blotches or streaks. The eggs are incubated by the female alone for 11-15 days. Both parents care for and feed young on terrestrial invertebrates and their larvae. On migration, the Olive-backed Pipit form flocks consisting of 5-20 individuals in the steppe. They mostly feed on the ground and perch on tree tops. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.4. on migration and feeding); 4. Grassland (4.4. on migration); 5. Wetlands (edges of 5.3., 5.4., 5.9. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2., 8.3.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. only on migration); 12. Artificial – Aquatic (near 12.6., 12.9. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation-1.1.4. Livestock-1.1.4.1. Nomadic /breeding habitats were overgrazed by livestock. Livestock destroy the nest containing eggs and young chicks/, 1.3. Extraction-1.3.1. Mining /gold and other mining activities have been affecting this species through habitat changes and destruction both breeding and feeding sites/- 1.3.3. Wood - 1.3.3.1. Small scale subsistence - 1.3.3.2. Selective logging- 1.3.3.3. Clear-cutting /logging for local fuel use and construction materials are a main threat to the species/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /tourist camps, resorts, and other construction activities are threatening to the species/, 1.7. Fires /forest fires burn breeding habitats/; 3. Harvesting (hunting or gathering)- 3.5. Cultural, scientific and leisure activities- 3.5.1. Subsistence use and local trade /some people occasionally shoot this species for souvenirs/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.2.2. Shooting /see 3.5.1/ -4.1.1.5. Poisoning /The Mongolian government uses the insecticide against Siberian Moth and other forest insects. The chemicals are a cause of poisoning of the species through the food chain/, 4.2. Collision-4.2.1. Pylon and building collision /collided birds have been found underneath all types of power lines, including 10 KV and 15 KV in Central Mongolia (Gombobaatar *et al.*, 2006; Harness & Gombobaatar, 2008; Harness *et al.*, 2008; Gombobaatar *et al.*, 2009; Harness *et al.*, 2009; Amartuvshin *et al.*, 2010&2010a; Harness & Gombobaatar, 2010)/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /coniferous and deciduous forests have been drying up due to drought apparently caused by global warming/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./ -7.3. Temperature extremes /overcooling of eggs and young chicks is also a potential threat to the species/; 8. Changes in native species dynamics- 8.2. Predators /Eurasian Sparrow Hawk, and Northern Goshawk prey on both adults and young in breeding site. This species is one of the main prey items of the Saker Falcon (Gombobaatar *et al.*, 2000; Gombobaatar *et al.*, 2001; Gombobaatar *et al.*, 2002; Gombobaatar, 2006; Gombobaatar *et al.*, 2006; Uuganbayar & Gombobaatar, 2010)/, 8.3. Prey and food base /lack of food due to insecticide use (see 4.1.1.5.) is a critic threat to the species/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses and resorts, and live the family with livestock in high numbers in breeding site, number of breeding pairs has been decreasing/, 10.4. Transport /see 1.3.1., 1.4.5./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

421. Scientific Name: *Anthus gustavi*

Species Authority: Swinhoe, 1863

Common Names: Pechora Pipit (English), Sibiriin shiihnuuhei (Mongolian)

Subspecies in Mongolia: *A. g. menzbieri* (see Howard & Moore (1994); Dawaa *et al.* (1994); Alström and Mild (2003); del Hoyo *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SFP-NUM, Mongolia), M.Munkhjargal (SFP-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: United States, Iceland, United Kingdom, France, Norway, Sweden, Poland, Finland, Russian Federation, China, Mongolia, Indonesia, Malaysia, Brunei Darussalam, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: In Mongolia, this species has been recorded in open river and lake valleys in Hövsgöl and Hentii (Boroo Lake, Herlen-Ulz River valley) mountains and Trans-Altai Gobi on migration (Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006). Sixteen birds were observed on the shore of Höh Lake with tall cover, Ulz River valley in August, 2004 (Badley *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. They migrate through the country by late April-early May (on spring migration) and late August-early September (on autumn migration). They form small flocks consisting of 5-10 individuals and pass through river valleys (Herlen, Ulz, Onon and Balj Rivers). On migration, they feed on insects and seeds on the ground with tall vegetated areas at edges of lakes and rivers.

Habitat Type: Potential habitats are 4. Grassland (4.4. on migration); 5. Wetlands (edges of 5.3., 5.4., 5.9. only on migration); 8. Desert (8.2., 8.3.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have been affecting this species through habitat changes/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /tourist camps, resorts, and other construction activities are threatening to the species/, 1.7. Fires /forest fires burn feeding habitats/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.1.5. Poisoning /The Mongolian government used the rodenticide against Brandt's Vole. The chemicals were a cause of poisoning of the species through the food chain/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /wetlands and grasslands near lakes drying up due to drought apparently caused by

global warming;/ 7.Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /Eurasian Sparrow Hawk, Northern Goshawk, and Saker Falcon prey on the species;/ 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses and resorts/, 10.4. Transport /see 1.3.1./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

422. Scientific Name: *Anthus cervinus*

Species Authority: (Pallas, 1811)

Common Names: Red-throated Pipit (English), Zosonguyeeet shiihnuuhei or zosonguyee shiihnuuhei (Mongolian)

Synonyms: *Motacilla cervina* (Pallas, 1811)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SFP-NUM, Mongolia), M.Munkhjargal (SFP-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Mexico, Iceland, Senegal, Mauritania, Gambia, Guinea-Bissau, Guinea, Morocco, Sierra Leone, Mali, Liberia, Ireland, Portugal, Spain, Algeria, Cote d'Ivoire, United Kingdom, Faroe Islands, Gibraltar, Burkina Faso, France, Ghana, Togo, Niger, Benin, Belgium, Nigeria, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Cameroon, Gabon, Liechtenstein, Libyan Arab Jamahiriya, Austria, the Democratic Republic of the Congo, Congo, Sweden, Czech Republic, Chad, Poland, Malta, Croatia, Bosnia and Herzegovina, South Africa, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece, Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Sudan, Zambia, Ukraine, Bulgaria, Egypt, Turkey, Russian Federation, Rwanda, Burundi, Tanzania, Uganda, Cyprus, Ethiopia, Kenya, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Eritrea, Iraq, Somalia, Djibouti, Yemen, Islamic Republic of Iran, Kazakhstan, Kuwait, Oman, Turkmenistan, Seychelles, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Maldives, China, Nepal, Mongolia, Bhutan, Myanmar, Indonesia, Thailand, Malaysia, Lao People's Democratic Republic, Viet Nam, Cambodia, Singapore, Brunei Darussalam, Australia, Hong Kong, Taiwan, Philippines, Democratic People's Republic of Korea, Republic of Korea, Japan, Palau.

Regional Distribution: The species migrates along Uvs, Khar, and Khar-Us Lake valleys (Great Lakes Depression), S Khangai, Hövsgöl and Hentii Mountain Ranges (including Orkhon, Selenge, and Herlen River Basins), Buir Lake-Khalkh River-Khyangan region, and Valley of the Lakes (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005). Fourteen birds were observed on Höh Lake shore with tall vegetation, Ulz River, Dornod province on August 2004 (Badley *et al.*, 2005).

Population: The global population consists of 5,000,000 - 50,000,000 mature individuals. Global breeding and resident ranges are estimated at 3,790,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. The species occurs in open habitats in forest steppe, mountain steppe and river and lake valleys river and lake valleys during its migration. The species migrates through Mongolia in flocks consisting of 4-15 individuals by late April-early May (on spring migration) and by late August-early September (on autumn migration), depending on weather conditions. They feed on terrestrial invertebrates and seeds on migration.

Habitat Type: Potential habitats are 4. Grassland (4.4. on migration); 5. Wetlands (edges of 5.3., 5.4., 5.9. only on migration); 8. Desert (8.2., 8.3.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have been affecting this species through habitat changes/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /tourist camps, resorts, and other construction activities are threatening to the species/, 1.7. Fires /forest fires burn feeding habitats/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.1.5. Poisoning /The Mongolian government uses rodenticide against Brandt's Vole. The chemicals are a cause of poisoning of the species through the food chain/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /wetlands and grasslands near lakes drying up due to drought apparently caused by global warming/; 7.Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /Eurasian Sparrow Hawk, Northern Goshawk, Saker Falcon prey on the species/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses and resorts/, 10.4. Transport /see 1.3.1./, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Motacillidae

423. Scientific Name: *Anthus spinoletta*

Species Authority: (Linnaeus, 1758)

Common Names: Water Pipit or Rock Pipit (English), Kharzny shiihnuuhei or kharzny shiihnuuhei (Mongolian)

Subspecies in Mongolia: *A. s. blackistoni* (see Dawaa *et al.* (1994); Alström and Mild (2003); del Hoyo *et al.* (2004) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SFP-NUM, Mongolia), M.Munkhjargal (SFP-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Morocco, Ireland, Portugal, Spain, Algeria, United Kingdom, Faroe Islands, Gibraltar, France, Andorra, Belgium, Netherlands, Norway, Luxembourg, Germany, Switzerland, Italy, Tunisia, Denmark, Liechtenstein, Libyan Arab Jamahiriya, Austria, Sweden, Czech Republic, Slovenia, Poland, Malta, Croatia, Bosnia and Herzegovina, Hungary, Slovakia, Montenegro, Serbia, Albania, Greece,

Romania, the Former Yugoslav Republic of Macedonia, Finland, Latvia, Ukraine, Bulgaria, Estonia, Egypt, Turkey, Russian Federation, Cyprus, Israel, Saudi Arabia, Jordan, Lebanon, Syrian Arab Republic, Iraq, Georgia, Armenia, Islamic Republic of Iran, Azerbaijan, Kazakhstan, Kuwait, Oman, Uzbekistan, Afghanistan, Pakistan, Tajikistan, India, Kyrgyzstan, China, Nepal, Mongolia, Taiwan, Republic of Korea.

Regional Distribution: This species breeds at Mongol-Altai (up to 3,500 m asl), Gobi-Altai, Khangai (2,800 m asl), Hövsgöl, and Hentii Mountain Ranges. It migrates through these mountain ranges and lake and river valleys in Orkhon-Selenge River basins, upper Herlen and Ulz River basins, northern Middle Khalkh Steppe, Mongol Daguur Steppe, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression and oases and small lakes in Trans-Altai, Northern and SW of Eastern Gobi (Kozlova, 1930; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Busching, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 10,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 3,670,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding individuals arrive in breeding sites by late April-early May at breeding and wintering grounds. Breeding season continues from May-July. Breeding habitats are alpine meadows and rocky slopes, water-courses at high altitudes. Breeding pairs build well-sheltered nest on the ground near rocks, bushes and shrubs in alpine and subalpine meadows and mountain tundra (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a cup built into a hollow, of plant stems and grasses and some moss, lined with finer grasses, or hair. The female usually lays 4-6 eggs of glossy whitish-grey, or ground colour with brown and pale grey spots. The eggs are incubated by the female alone for c. 14 days. Both adults care for and feed young on terrestrial invertebrates. It feeds on seeds of various plants. The young leave nest at 14-16 days and live independently at c.14 days more. They migrate in small flocks consisting of 4-12 birds in the steppe. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 3. Shrub-land (3.4. on migrations); 4. Grassland (4.4. on migration); 5. Wetlands (at edges of 5.1. -5.9. on migration); 6. Rocky areas; 8. Desert (8.2.); 11. Artificial – Terrestrial (11.3. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have been affecting this species through habitat changes/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /tourist camps, resorts, and other construction activities are threatening to the species/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.1.5. Poisoning /The Mongolian government used the rodenticide against Brandt's Vole. The chemicals were a cause of poisoning of the species through the food chain/, 4.2. Collision-4.2.1. Pylon and building collision /potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /wetlands and grasslands near lakes dried out due to drought caused by global warming/; 7. Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /Eurasian Sparrow Hawk and Saker Falcon prey on the species/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses and resorts/, 10.4. Transport /see 1.3.1./.

Conservation Measures: Approximately 10.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes
Family: Motacillidae

424. Scientific Name: *Anthus rubescens*

Species Authority: (Tunstall, 1771)

Common Names: American Pipit, Buff-bellied Pipit, or Mountain Pipit (English), Amerikiin shiihnuuhei (Mongolian)

Subspecies in Mongolia: *A. r. japonicus* (see Dawaa *et al.* (1994); Alström and Mild (2003); del Hoyo *et al.* (2004) for further details)

Synonyms: *Alauda rufescens* (Tunstall, 1771)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: D.Sumiya (NUM & MOS, Mongolia), W.Sally (ZSL, UK), G.Batbayar (SFP-NUM, Mongolia), M.Munkhjargal (SFP-NUM, Mongolia), and B.Bayarjargal (MAS, Mongolia).

Global Distribution: Canada, United States, Mexico, Guatemala, El Salvador, Honduras, Cayman Islands, Jamaica, Columbia, Bahamas, Turks and Caicos Islands, Saint Pierre and Miquelon, Bermuda, Iceland, Ireland, United Kingdom, Germany, Italy, Egypt, Russian Federation, Israel, Kazakhstan, Oman, Pakistan, India, China, Nepal, Bhutan, Myanmar, Thailand, Viet Nam, Taiwan, Democratic People's Republic of Korea, Republic of Korea, Japan.

Regional Distribution: Migratory individuals have been observed in Ulz River valley (Mongol Daguur Steppe), lower Herlen River (Choibalsan town) and Eastern Mongolian Plain on migration (Kozlova, 1930; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Tsevenmyadag *et al.*, 2005).

Population: The global population consists of 20,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. The species migrates through open habitats with tall vegetation and small bushes in lake and river valleys by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. They migrate together with Red-throated Pipits in eastern Mongolia. They feed on terrestrial and aquatic insects and their larvae and seeds of various plants in autumn. Migration and feeding behavior is poorly known in Mongolia.

Habitat Type: Potential habitats are 4. Grassland (4.4. on migration); 5. Wetlands (edges of 5.3., 5.4., 5.9. only on migration); 8. Desert (8.2., 8.3.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation-1.3. Extraction-1.3.1. Mining /gold and other mining activities have been affecting this species through habitat changes/, 1.4. Infrastructure development-1.4.1. Industry-1.4.2. Human settlement-1.4.3. Tourism and recreation /tourist camps, resorts, and other construction activities are threatening to the species/; 4. Accidental mortality- 4.1.2. Terrestrial- 4.1.1.5. Poisoning /The Mongolian government used the rodenticide against Brandt's Vole. The chemicals were a cause of poisoning of the species through the food chain/, 4.2. Collision-4.2.1. Pylon and building collision / potential threat to the species/; 5. Persecution- 5.1. Pest control /see 4.1.1.5./; 6. Pollution (affecting

habitat and species)- 6.1. Atmospheric pollution-6.1.1. Global warming /wetlands and grasslands near lakes dried out due to drought caused by global warming/; 7.Natural disasters-7.1. Drought /see 1.1.4.1., 6.1.1./; 8. Changes in native species dynamics- 8.2. Predators /Eurasian Sparrow Hawk and Saker Falcon prey on the species/; 10. Human disturbance- 10.1. Recreation and tourism /due to construction of private houses and resorts/, 10.4. Transport /see 1.3.1./.

Conservation Measures: Approximately 9.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

425. Scientific Name: *Fringilla coelebs*

Species Authority: Linnaeus, 1758

Common Names: Chaffinch or Common Chaffinch (English), Duulgat bujirga or duulgat eeruul byalzuukhai (Mongolian)

Subspecies in Mongolia: *F. c. coelebs* (see Svensson (1992); Clement *et al.* (1993); Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Thailand. It has been introduced to Australia and New Zealand.

Regional Distribution: This species nests in trees of woodlands in lower Torkholig River valley (N Uvs Lake). It migrates through woodlands and open dry steppe with bushes in the Great Lakes Depression, S Hentii (Ulaanbaatar city), Middle Khalkh Steppe, Herlen-Ulz River basins, and Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Piechocki *et al.*, 1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005) and mountains in Khantai and Buregkhangai, Bulgan province (Sh.Boldbaatar pers. comm.).

Population: The global population consists of 500,000,000 - 1,500,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and migrating individuals arrive in migrating, feeding and breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. It breeds in woodland and woodland edge, also in scrub, and thickets in Torkholig River basin. The nest is placed in a tree or taller shrub, usually built tightly into a fork. The nest is a deep cup constructed of moss mixed with lichen, grasses, and roots. The female usually lays 4-5 eggs of glossy bright blue colour with pinkish tinged blotches, darkish chestnut-red, or pinkish sparsely spots, streaks or scrawls. The female incubates the eggs alone for 11-13 days. Both adults care for and feed young on terrestrial insects and their larvae, spiders, and other invertebrates. They leave the nest at 12-15 days. On migration, they dominantly feed on seeds of various plants. This species forms loose flocks. In the non-breeding season, sometimes they mixed with Bramblings. Adults also eat insects in the breeding season (Newton, 1973). They leave the breeding site for wintering grounds by late August-early September. On migration, they occur in open habitats in the above-mentioned areas in Mongolia.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) on migration/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport / transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.2 % of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

426. Scientific Name: *Fringilla montifringilla*

Species Authority: Linnaeus, 1758

Common Names: Brambling (English), Alag bujirga or alag khuukhuur byalzuukhai (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Thailand; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in Hövsgöl Lake and Its adjacent areas (Hövsgöl Mountain Range), Eg and Selenge River valleys, Khantai and Buteel mountains (Orkhon-Selenge River basins). It migrates through the breeding areas, open dry steppe, mountain slopes with rocks and bushes and river valleys with deciduous and mature trees in Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest), Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes and oases in Gobi (Dzungar, Trans-Altai, Northern, Alashani and SW of Eastern Gobi) (Tugarinov, 1916; Kozlova, 1930; Tugarinov, 1932; Tarasov, 1960; Mauersberger, 1980; Piechocki *et al.*, 1982; Rogacheva, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 80,000,000 - 250,000,000 mature individuals. Global breeding and resident ranges are estimated at 13,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. The species arrives at breeding sites by late April-early May. Breeding season continues from May-July. Breeding pairs nest in trees in open deciduous and mixed forest (Bold *et al.*, 2005; Gombobaatar, 2012). Female builds own nest in a tree and rarely a bush. The nest is a deep cup of moss mixed with grass and hair, bound with spiders' webs, and lined with hair, down, feathers and wool. The female usually lays 5-7 eggs, glossy light blue colour with pink or light red blotches, sparsely marked with spots or small blotches. The female incubates the eggs alone for 11-12 days. Both adults care for and feed the young on insects and spiders in breeding. The young leave nest at 11-13 days. On migration, they feed on seeds of various

plants. The species occurs in pairs and flocks consisting of 3-12 birds in open habitats across Mongolia on migration. They leave their breeding and summering areas for wintering grounds by late August–mid-September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (feeding on shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence-1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide against forest insects on migration /, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk prey upon this species on migration/, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.2 % of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

427. Scientific Name: *Serinus pusillus*

Species Authority: (Pallas, 1811)

Common Names: Fire-fronted Serin or Red-fronted Serin (English), Ulaandukht syerin (Mongolian)

Synonyms: *Passer pusillus* (Pallas, 1811)

Global Status: Least Concern

Regional Status:

Rationale for Assessment: This species has been assessed as Not Applicable. It's total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Greece; Egypt; Turkey; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian

Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal.

Regional Distribution: During the week of 21–28 October 2002, Richard Reading and Henry Mix observed several Red-fronted Serins *Serinus pusillus* at the Bogd Tsagaan Dersnii Bulag oasis (43.11°N 97.18°E) in Section “A” of the Great Gobi Strictly Protected Area (GGSPA), Gobi-Altai province, in southwestern Mongolia. About 12 serins were observed in mixed-species flocks visiting the oasis in a relatively level area surrounded by sparsely vegetated areas of *Hamada* (a type of desert landscape consisting of largely barren hard rocky plateau with very little sand) to the north and north-west and hills in other directions. The birds came to drink in flocks of 5–40 individuals at a tiny (4 m²) pool surrounded by Common Reed *Phragmites australis*. Although the exact number of serins was difficult to determine, flocks often contained 1–3 individuals of the species. They observed the birds at distances of 2–100 m using 10x40 binoculars and took photographs (Reading *et al.*, 2011).

Population: The global population consists of 5,000,000 - 50,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The observation would not tell us either the species migrates along southern part of Mongolia or wintering in the area because it is very late for migrants. However, it migrates through southern Mongolia. This species is also found in Ladakh, India. It prefers high mountain regions and feed on seeds of various plants. Outside the breeding season, the species occurs in small flocks, typically seen searching through dense bushes and scrub. It is a popular cage bird in Europe.

Habitat Type: 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming; 7. Natural disasters- 7.1. Drought; 8. Changes in native species dynamics- 8.2. Predators; 10. Human disturbance- 10.1. Recreation and tourism.

Conservation Measures: Specific conservation measures have not been implemented for this species. The species occurs in some protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

428. Scientific Name: *Carduelis chloris*

Species Authority: (Linnaeus, 1758)

Common Names: European Greenfinch or Western Greenfinch (English), Nogoovor bujiranga (Mongolian)

Subspecies in Mongolia: *C. c. turkestanicus* (see Clement *et al.* (1993); Howard & Moore (1994) for further details)

Synonyms: *Loxia chloris* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Argentina; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan. It has been introduced to Australia; New Zealand; Uruguay.

Regional Distribution: A.Bräunlich observed and documented a single bird in Khovd town as a first record of the species for Mongolia on 23-24 October, 2005. An adult male and a juvenile were found by V.Holmgren (birdwatcher from Sweden) and A.Bräunlich found at the "Airport plantation" near Khovd town on 18 October, 2006. The second record was less than two km away from the first record (Bräunlich, 2006a). A.Bräunlich and Katja found another individual at Otzon Chuluu (Otson Chuluu), a plantation is situated in north of Khovd town of Khovd province on 17 November, 2007 (Bräunlich, 2006).

Population: The global population consists of 45,000,000 - 150,000,000 mature individuals. Global breeding and resident ranges are estimated at 9,710,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. According to the observation, they stay in the country until mid of November. They inhabit planted trees and forested areas in western Mongolia. In Europe, the species occurs in flocks outside the breeding season, sometimes mixing with other finches and buntings. They feed largely on seeds, but also take berries and other fruits on migration.

Habitat Type: 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration); 11. Artificial - Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting , 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation, 1.7. Fires; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming; 7. Natural disasters- 7.1. Drought; 8. Changes in native species dynamics- 8.2. Predators; 10. Human disturbance- 10.1. Recreation and tourism, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species. The species occurs in protected areas and Important Bird Areas in Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

429. Scientific Name: *Carduelis sinica*

Species Authority: (Linnaeus, 1766)

Common Names: Grey-capped Greenfinch, Oriental Greenfinch or Chinese Greenfinch (English), Nangiad bujiranga, nangiad nogooldoi or nangiad altan jiguur (Mongolian)

Subspecies in Mongolia: *C. s. chabarovi*, *C.s. ussuriensis* (see Howard & Moore (1994); Clement *et al.* (1993) for further details)

Synonyms: *Chloris sinica* (Linnaeus, 1766)

Taxonomical Notes: According to various authors, including Stepanyan (1978 &1990), Fomin&Bold (1991), Dawaa *et al.* (1994), Gavrilov (1999), Stepanyan (2003), Bold *et al.* (2005), Gavrilov&Gavrilov

(2005), Gombobaatar (2009), Tseveenmyadag *et al.* (2010), it was belonging to the genus, *Spinus*. However, BirdLife International (2011) has considered that this species should belong to *Carduelis* group. Therefore, its correct name is *Carduelis spinus*.

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Russian Federation; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: The species migrates along coniferous and deciduous trees. N.Tseveenmyadag recorded a bird in valley of Buir Lake of Dornod province in May, 1994 and G. Leithaus found an individual in Nömrög River in June, 1994 (Fomin & Bold, 1991; Dawaa *et al.*, 1994). S.Gombobaatar saw and photographed a pair in old pine trees at Deluun Boldog in Dadal sum of Hentii province on 14 July, 2008. It is most likely a breeding in this area (S.Gombobaatar pers. comm. and photographs).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia and possibly breeding species in the east. The species migrates along eastern Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration). They feed on seeds of various plants. It forages in trees, shrubs and on the ground. They occur singly, or in small groups joining with other finches in perch on tree tops on migration.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / overgrazing of livestock near possible breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in possible breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 22.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

430. Scientific Name: *Carduelis spinus*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Siskin or Siskin (English), Egel bujiranga, egel nogoolzoi or nogoolzoi (Mongolian)

Synonyms: *Spinus spinus* (Linnaeus, 1758)

Taxonomical Notes: According to various references (Stepanyan, 1978 & 1990; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Gavrilov, 1999; Stepanyan, 2003; Bold *et al.*, 2005; Gavrilov & Gavrilov, 2005; Gombobaatar, 2009; Tseveenmyadag *et al.*, 2010), this species belongs to *Spinus* genus. However, BirdLife International (2011) has decided to name this species as *Carduelis spinus* based on various taxonomical studies.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Finland; Saint Pierre and Miquelon; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Hong Kong; Taiwan; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests in high branches of coniferous trees in coniferous and deciduous forest (Bold *et al.*, 2005; Gombobaatar, 2012) in eastern Hövsgöl region (Uur River valley) and possibly nests north to 50 degrees latitude and east to Zelter River valley, Selenge province. It migrates through the breeding areas, open dry habitats, mountain slopes with rocks and bushes, lake and river valleys with tall cover and mountain valleys in Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense taiga forest), east through Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Kozlova, 1930; Tarasov, 1960; Grummit, 1961; Kleinstäuber & Succow, 1978; Mauersberger, 1980; Piechocki *et al.*, 1982; Stephan, 1988; Rogacheva, 1988; Sumiya & Skryabin, 1989; Sumiya & Skryabin, 1990; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006). It is also a wintering species in Mongolia. From 3 to 13 individuals were found and photographed in Terelj, Bogd Mountain and Hustai National Park in December, 2009 and January, 2010 (S.Gombobaatar & P.Amartuvshin pers. comm. and photographs).

Population: The global population consists of 30,000,000 - 70,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor, passage migrant and winter visitor. Most breeding birds and migrating individuals arrive in their feeding and breeding sites by late April-early May. Breeding season continues from May-July. Its nest is placed in a conifer, usually out towards the end of a branch, and often high up. The nest is a cup of small twigs, grass, moss and wool, lined with hair, wool, plants and feathers. The female usually lays 3-5 eggs of glossy pale blue to very pale blue colour with lilac and pink speckles, and purplish or reddish-brown small blotches. The female incubates the eggs for 11-14 days. Both sexes care for and feed the young on terrestrial invertebrates and seeds at 6-7 days, later both parents bring food, feeding young by regurgitation. 13-15 days. In the non-breeding season, they eat seeds of deciduous trees. They are very active and restless birds. They are also very social, forming small cohesive flocks especially on migration. It feeds in trees, and on the ground in the steppe. They remain close to the nest area for up to a month when, with their plumage now complete, they disperse. It forms flocks consisting of 4-20 individuals and feed in trees. They also winter and feed with Common Redpolls and Twites in seeds of coniferous and deciduous trees. Most breeding and migrating individuals leave the country for wintering grounds by mid-September –mid-October, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas (on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*)/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk prey upon this species on migration/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

431. Scientific Name: *Carduelis carduelis*

Species Authority: (Linnaeus, 1758)

Common Names: European Goldfinch, Goldfinch or Eurasian Goldfinch (English), Bor bujiranga or bor bujirga (Mongolian)

Subspecies in Mongolia: *C.c.caniceps*, *C. c. subulata?* (Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Fringilla carduelis* (Linnaeus, 1758)

Taxonomical Notes: Fomin&Bold (1991), Dawaa *et al.* (1994), Stepanyan (1978, 1990 & 2003), Gavrilov (1999), Gavrilov&Gavrilov (2005), Bold *et al.* (2007), Gombobaatar (2009) have considered that *Carduelis caniceps* Vigors, 1831 (Grey-crowned Goldfinch or Grey-headed Goldfinch in English and Buural bujiranga or Buural bujirga in Mongolian) split into two separate species: *Carduelis carduelis* (Linnaeus, 1758) and *Carduelis caniceps* Vigors, 1831. However, most recent publications (Brazil, 2009; Arlott, 2009; BirdLife International, 2010) have not supported this separation that the subspecies is one of the separate species.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Cape Verde; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia. It has been introduced to Argentina; Australia; Bermuda; Brazil; New Zealand; Uruguay and is possibly extinct in the United States.

Regional Distribution: This species nests in 2-5 m high trees in mixed and deciduous forest with bushes in valleys (Gombobaatar, 2012) of Bulgan and Khovd Rivers (Baruunkhurai Depression), Torkholig River delta (Northern Uvs Depression and Great Lakes Valley) and Hövsgöl Lake areas (Hövsgöl Mountain Range). It migrates through the breeding areas, open dry habitats, lake and river valleys with tall cover and mountain slopes with rocks and bushes in Great Lakes Depression, Herlen-Ulz River basins, Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region (Piechocki *et al.*, 1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a).

Regional distribution of *Carduelis carduelis caniceps* (Grey-crowned Goldfinch or Grey-headed Goldfinch): Its Mongolian name is Buural bujiranga or Buural bujirga. In Mongolia, this subspecies nests on the edges of woodland with relatively thick vegetation in mountain forest and river valleys: from Ölgii town to lower Khovd and lower Torkholig River valleys (northern Uvs Lake) and Bulgan River basin (Baruunkhurai Depression). Migration is poorly known within the country (Tugarinov,

1916; Piechocki *et al.*, 1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stepanyan, 1978, 1990&2003). It is globally distributed through Kazakhstan, India, and Nepal. Approximately 11.0% of the species' range in Mongolia occurs within protected areas.

Population: The global population consists of 75,000,000 - 350,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding species and passage migrant. Most breeding and migrating individuals arrive in breeding and summering sites by late April-early May. Breeding season continues from May-July. Breeding habitats are scattered trees, woodland edges and open woodland with clearings. The nest is built by the female in a tree or more rarely in a tall shrub, usually in twigs towards the end of a branch of a tree. The nest is a neat compact cup of moss, roots, grass, lichens, wool and plant down, lined with plant down and wool, and sometimes hair and feathers. The male brings nest materials. The female usually lays 4-6 glossy very pale blue or creamy eggs with purple, purplish- black, red or pinkish spots, speckles, blotches and streaks. Eggs are incubated by the female alone, fed by male for 12-14 days. Both parents feed young on insects, other arthropods and seeds. On migration, they eat seeds of various plants. In European countries people breed this species at home as a pet because of its nice song. In winter, Goldfinches form flocks of up to 6 birds, occasionally more in Mongolia. They are found in open habitats with bushes and trees in the country. They leave their breeding ground by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / overgrazing of livestock near possible breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 7. Natural disasters- 7.1. Drought / due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in feeding and possible breeding sites/; 10. Human disturbance- 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

432. Scientific Name: *Acanthis flammea*

Species Authority: (Linnaeus, 1758)

Common Names: Common Redpoll, Redpoll, Holarctic Redpoll or Lesser Redpoll (English), Dölön tsegtsuuhei or ulaan tolgoit bujirga (Mongolian)

Subspecies in Mongolia: *A. f. flammea* (see Svensson (1992); Clement *et al.* (1993); Howard & Moore (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Carduelis flammea* (Linnaeus, 1758); *Fringilla flammea* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further

research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Jamaica; Bahamas; Saint Pierre and Miquelon; Bermuda; Greenland; Iceland; Ireland; Portugal; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Romania; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Moldova; Russian Federation; Cyprus; Azerbaijan; Kazakhstan; Uzbekistan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan. It has been introduced to Australia and New Zealand.

Regional Distribution: This species nests in mixed and deciduous forest possibly in the high mountains of northern Hövsgöl Mountain Range (Sumiya & Skryabin, 1989). A breeding pair was found in a peak of Taishir Mountain of Gobi-Altai province (Tarasov, 1960). It winters in open dry habitats with tall grass with seeds, river and lake valleys with bushes and thickets, mountain slopes with rocks and tall grass and the edge of forests in high mountains, forest steppe, desert steppe and mountains (Bold *et al.*, 2005; Gombobaatar, 2012) in Gobi-Altai, Khangai, Hövsgöl and Hentii Mountain Ranges, Middle Khalkh and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region and Baruunkhurai Depression (Berezovskii, 1881; Tarasov, 1960; Piechocki *et al.*, 1982; Sumiya&Skryabin, 1989; Fomin & Bold, 1988&1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 18,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder, winter visitor and passage migrant. Breeding begins in late May –mid-June. Breeding habitats in Mongolia are birch scrub, mixed conifer and birch woodland, areas of scrub, and scattered trees. The nest is placed in a tree, shrub or bush, often high in trees, but at times down to ground level. The nest is a small untidy cup of fine twigs and plant stems, lined with finer plants, feathers and hair. The female lays the eggs usually 4-5 eggs of slightly glossy or non-glossy pale-blue colour with dark purple or reddish-brown, or lighter pink or lilac markings spots, small blotches and scrawls, dense markings at the larger end. The female incubates the eggs alone for 10-13 days. Both adults feed their young on grasshoppers, spiders, beetles and seeds at 11-14 days in the nest (Harris, 1975). In winter and during seasonal movements, it eats primarily seeds and fruits of various plants. It form flocks consisting of 4-200 individuals in open areas with tall vegetation, planted trees, wheat fields, deciduous and coniferous trees, bushes and scrub. The flocks stay with flocks of Hoary Redpoll and Twite in winter. They move down to lowland in winter depending on food availability and snow cover. They feed on seeds of larch, pine, birch, and poplar trees in edges of branches and tree top. Most passage migrants migrate across Mongolia by late February to the north. Seasonal movement and migration depends on snow cover and food in Mongolia.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration and seasonal movement); 5. Wetlands (5.2., 5.3., 5.11.); 6. Rocky areas; 8. Desert (8.2. on migration and seasonal movement); 11. Artificial – Terrestrial (11.3., 11.4. on migration and seasonal movement).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure

development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) on migration and seasonal movement/, 4.2. Collision-4.2.1. Pylon and building collision / this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic / domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/.

Conservation Measures: Approximately 8.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

433. Scientific Name: *Acanthis hornemanni*

Species Authority: (Holboell, 1843)

Common Names: Hoary Redpoll or Arctic Redpoll (English), Shunkhan tsegtsuuhei or shunkhan zulait bujirga (Mongolian)

Subspecies in Mongolia: *A. h. exilipes* (see Svensson (1992); Clement *et al.* (1993); Howard & Moore (1994) for further details)

Synonyms: *Carduelis hornemanni* (Holboell, 1843)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Saint Pierre and Miquelon; Greenland; Iceland; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Denmark; Svalbard and Jan Mayen; Sweden; Czech Republic; Poland; Hungary; Slovakia; Romania; Finland; Latvia; Ukraine; Russian Federation; Kazakhstan; China; Mongolia; Japan.

Regional Distribution: In Mongolia, this species winters in Mongol-Altai (Khovd River valley), Khangai, Hövsgöl and Hentii Mountain Ranges and Orkhon-Selenge River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh Gol and Baruunkhurai Depression (Berezovskii, 1881; Molleson, 1906; Tugarinov, 1916; Kozlova, 1930; Tugarinov, 1932; Kozlova, 1932; Tarasov, 1960; Mauersberger, 1980&1982; Polyakov, 1912 *et al.*, 1982; Potapov, 1986; Piechocki *et al.*, 1986; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 30,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a winter visitor. First flocks arrive in wintering sites of the country early to mid-November depending on snow cover and seeds. They are found in open dry habitats with tall plants, river and lake valleys with bushes and thickets, mountain slopes with rocks and tall grasses, and at the edge of forests (Bold *et al.*, 2005; Gombobaatar, 2012). They form flocks consisting of 3-10 individuals, and usually stay together with Common Redpoll flocks. They eat seeds and fruits of various plants including coniferous and deciduous trees, in trees and on the ground in winter and during seasonal movements during seasonal movements. From mid - late February to early March, they move to the north of the country.

Habitat Type: 1. Forest (1.4. in winter, and on migration); 3. Shrub-land (3.3., 3.4. in winter, and on migration); 4. Grassland (4.4. in winter, and on migration); 6. Rocky areas (in winter, and on migration); 11. Artificial – Terrestrial (11.3., 11.4. in winter, and on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock at the wintering site of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near wintering sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) on migration and seasonal movement/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution-6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in wintering sites disturb this species/.

Conservation Measures: Approximately 10.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

434. Scientific Name: *Acanthis flavirostris*

Species Authority: (Linnaeus, 1758)

Common Names: Twite (English), Ulaan tsegtsuuhei or ulaan bor bujirga (Mongolian)

Subspecies in Mongolia: *A. f. altaica*, *A. f. korejevi* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Carduelis flavirostris* (Linnaeus, 1758), *Fringilla flavirostris* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Ireland; Portugal; Spain; United Kingdom; Faroe Islands; France; Belgium;

Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Czech Republic; Slovenia; Poland; Croatia; Hungary; Slovakia; Montenegro; Serbia; Romania; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Turkey; Russian Federation; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia.

Regional Distribution: This species breeds from Tavan Bogd and Siilhem Mountains to Hurh Mountain (south-eastern Gobi-Altai Mountain Range); Great Lakes Depression; Southern Khangai Plateau; Khan Höhii, Tarvagatai and Bulnai ranges (Khangai Mountain Range); Hövsgöl Mountain Range including Darkhad Depression; Orkhon-Selenge River basins; Hentii Mountain Range; Middle Khalkh Steppe; Eastern Mongolian Plain (very scarce); Buir Lake-Khalkh River-Khyangan region. It is found in the breeding territories, dry open habitats near water, rocky mountain slopes and lake and river valleys with rocks and bushes in Valley of the Lakes, Baruunkhurai Depression and Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) during seasonal movements (Berezovskii, 1881; Molleson, 1906; Tugarinov, 1916; Kozlova, 1932; Tugarinov, 1932; Tarasov, 1960; Mauersberger, 1980; Polyakov, 1912 *et al.*, 1982; Piechocki *et al.*, 1982; Potapov, 1986; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1988&1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 1,000,000 - 10,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in early to mid-May. Breeding habitats are mountain slopes with boulders and cliffs, dry open mountain steppe with sparse vegetation and scattered bushes; dry river valleys near mountain slopes with bushes in high mountains (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female builds own nest on the low cover and rough herbage, in hollows and holes of banks and rocky slopes, and on rock ledges. The nest is a bulky cup of grasses and plant stems, lined with wool, hair and feathers. The female usually lays 5-6 eggs of slightly glossy or non-glossy pale blue with varied specks, spots, small blotches and scrawls in dark purple or reddish-brown, with lighter pink or lilac markings. The female incubates the eggs alone for 12-13 days. Both adult bird care for and feed the young in the nest at 15 days. In breeding they feed on grasshoppers, flies, beetles and other terrestrial insects. They form flocks consisting of 4-10 individuals and eat seeds and fruits of various plants in winter and seasonal movement. They stay in flocks, sometimes occur mixed group with Redpolls, and other small finches in open areas with tall grasses and forest edges, wheat fields, rocky mountain and hillsides, lake and river valleys and planted trees in towns and cities. They move down to hill side in winter (altitudinal movement).

Habitat Type: 1. Forest (1.4. during seasonal movements); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.2., 5.3., 5.11.); 6. Rocky areas; 8. Desert (8.2. only during seasonal movements); 11. Artificial – Terrestrial (11.3., 11.4. only during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*)/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker

Falcon and Eurasian Sparrowhawk during seasonal movements /, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

435. Scientific Name: *Acanthis cannabina*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Linnet or European Linnet (English), Altan tsegtsuuhei (Mongolian)

Subspecies in Mongolia: *A. c. bella* (see Svensson (1992); Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Cardeulis cannabina* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. The population size is unknown and the species' distribution in Mongolia is limited. Further population information is needed to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Bermuda; Mauritania; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; United Arab Emirates; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia.

Regional Distribution: This species nests in areas with thick bushes in mountain forest, forest steppe and river valleys in Yolt River valley, upper Khovd River to Bulgan River basin (Mongol-Altai Mountain Range) and Torkholig River delta (northern Uvs Lake) (Great Lakes Depression). It is found only in these breeding areas. Records on migration have not been confirmed in the country yet (Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 40,000,000 - 150,000,000 mature individuals. Global breeding and resident ranges are estimated at 12,200,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May. Breeding ecology and migration behaviour have poorly studied in Mongolia. Breeding habitats are low shrub and scattered bushes in mountain, forest steppe and river valley. According to

Harrison (1975), its nest is placed in a bush, or rarely on tall plants. The nest is a bulky cup of grass, plant stems, moss, and small twigs, lined with hair and wool. Female lays 4-6 eggs of slightly glossy pale blue to whitish blue colour with pinkish, purplish speckles, spots and blotches at the larger end. Eggs are incubated by the female at 10-14 days. The female broods young and feed them on insects and seeds of plants at 14-17 days. On migration and seasonal movement, it forms flocks with Redpolls and Twites. In the non-breeding season, they feed on seeds and fruits on the ground and in trees and bushes.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

436. Scientific Name: *Leucosticte nemoricola*

Species Authority: (Hodgson, 1836)

Common Names: Plain Mountain Finch, Hodgson's Mountain Finch or Hodgson's Rosy Finch (English), Khimalain zangalai or khimalain tsakhir bujirga (Mongolian)

Subspecies in Mongolia: *L. n. altaica* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Turkmenistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar.

Regional Distribution: This species breeds in Tsagaan Shuvuut, Kharkhiraa, Turgen and Khan Höhii Mountains (> 2,500 m asl) in Mongol-Altai Mountain Range. In winter, it moves down the mountain slopes and valleys to the breeding areas (altitudinal movement) (Potapov, 1986; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003;).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. This species begins to breed by late May–early June depending on snow cover. Breeding pairs nest under rocks, often burrows in alpine and subalpine meadows with cliffs and rock slides in the high mountains. Breeding ecology is poorly known in Mongolia. The female lays 3-6 eggs with the colour of other finch eggs. Both parents feed young on terrestrial insects, spiders, and seeds of various plants. They stay in pairs and small flocks and feed on seeds of *Artemisia* spp. on the ground and on rocks, perches in trees and bushes. The flocks move down to low mountain-slopes, hillsides, and low meadows. Pairs and single birds occur in creeks, springs and other open water points to drink at midday. During seasonal movements, they descend to mountain valleys.

Habitat Type: 3. Shrub-land (3.3.); 4. Grassland (4.1., 4.4.); 5. Wetlands (5.2., 5.3., 5.11. for drinking).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near wintering and breeding sites of the species is a cause of habitat degradation associated with drought/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in wintering and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, and drought both wintering and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of tourist camps and resorts, and others in wintering and breeding sites disturb this species/.

Conservation Measures: Approximately 13.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

437. Scientific Name: *Leucosticte brandti*

Species Authority: Bonaparte, 1851

Common Names: Black-headed Mountain-finch, Brandt's Mountain Finch, or Brandt's Rosy Finch (English), Artsny zangalai or tsakhir bujirga (Mongolian)

Subspecies in Mongolia: *L. b. margaritacea*, *L. b. brandtii* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Turkmenistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bhutan.

Regional Distribution: This species breeds and winters in massif of Tavan Bogd, Siilhem (Mongol-Altai) to Gichgene Range on the border of Gobi-Altai Mountain; through northern Hövsgöl Lake. It moves down to foothills of high mountains during seasonal movements (Kozlova, 1932; Tugarinov, 1933; Bold, 1973; Stepanyan, 1973 & 1978; Polyakov, 1912, 1982; Potapov, 1986; Sumiya & Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. It nests and winters in upper, treeless zones of high mountains with cliffs, rockslides and crests of mountain range over 2,000 m asl. They nest in rock crevices, and cracks of cliffs. Female lays 3-5 eggs with very pale blue or whitish blue colour with pinkish spots and blotches. The female incubates the eggs. Both parents feed young on insects and seeds in the nest. After the breeding season, they form flocks of 4-12 individuals and feed on seeds of various plants on the ground and in tall plants, and trees. The flocks move down to low land in open rocky areas, mountain slopes, lake and river valleys with bushes and scrub by October –November depending on weather conditions and seeds. The flocks stay with other seed eating birds' flocks of Twite and Common Redpoll in Mongolia in winter.

Habitat Type: 1. Forest (1.4. during seasonal movements); 3. Shrub-land (3.3., 3.4. during seasonal movements); 4. Grassland (4.1., 4.4.); 5. Wetlands (5.2., 5.3., 5.11. for drinking); 6. Rocky areas; 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near wintering and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near wintering and breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in wintering and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, and drought both wintering and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near wintering and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Approximately 16.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes
Family: Fringillidae

438. Scientific Name: *Leucosticte arctoa*

Species Authority: (Pallas, 1811)

Common Names: Asian Rosy-finch, Rosy Finch, Rosy Mountain Finch or Arctic Rosy Finch (English), Zankhgar zangalai or bukhyn dukh bujirga (Mongolian)

Subspecies in Mongolia: *L. a. arctoa*, *L. a. sushkini*, *L. a. gigliolii*, *L. a. cognata*
(see Clement *et al.* (1993); Howard & Moore (1994) for further details)

Synonyms: *Passer arctous* (Pallas, 1811)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds and winters in Kharkhiraa (Mongol-Altai Mountain Range); from Otgontenger Mountain to Suvarga Khairkhan Range (Khangai Mountain Range); alpine zone (2,800-3,000 m asl) in Ih Bogd (Gobi-Altai Mountain Range), northern Hövsgöl Lake and the main range of Hentii Mountain. The species occurs on mountain slopes with rocks and cliffs on the Southern Khangai Plateau and river valleys of upper Herlen and Ulz Rivers (Herlen-Ulz River basins), Onon and Balj Rivers during altitudinal movements (Kozlova, 1930&1932; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 2,720,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May–early June depending on weather conditions. Breeding pairs nest in cliff crevices and between rocks in mountain tundra with large rocks, boulders and cliffs (Bold *et al.*, 2005; Gombobaatar, 2012). Breeding ecology has not been well studied in Mongolia. However, field documentations show that female lays 3-5 pale blue to whitish-blue colour with reddish or pinkish spots and blotches. The female incubates the eggs and feeds young at young age. Both adults care for and feed the young on insects, spiders, other terrestrial invertebrates and seeds. They form flocks and forage seeds and fruits of various plants on the ground and in bushes and scrub During seasonal movements and in winter. Depending on snow and seeds, they visit lowlands of high mountain ranges by November-December and return to high mountain habitats by February -March. Sometimes, their flocks stay with Great Rose-finches in winter.

Habitat Type: 3. Shrub-land (3.3., 3.4. during seasonal movements); 4. Grassland (4.1., 4.4.); 5. Wetlands (5.2., 5.3., 5.11. for drinking); 6. Rocky areas.

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near wintering and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining

activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near wintering and breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in wintering and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, and drought both wintering and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near wintering and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Approximately 10.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

439. Scientific Name: *Rhodopechys obsoletus*

Species Authority: (Lichtenstein, 1823)

Common Names: Desert Finch or Lichtenstein's Desert Finch (English), Tsöliin bojrog (Mongolian)

Synonyms: *Rhodospiza obsoleta* (Lichtenstein, 1823); *Fringilla obsoleta* (Lichtenstein, 1823)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Libyan Arab Jamahiriya; Egypt; Turkey; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Islamic Republic of Iran; Kazakhstan; Kuwait; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; Kyrgyzstan; China; Mongolia.

Regional Distribution: A.Bräunlich documented a single bird at Khovd town of Khovd province on 8 April, 2007 (A.Bräunlich pers. comm.).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 4,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. A single bird was photographed in western Mongolia on spring migration. It may migrate through western Mongolia by early April-early May (on spring migration) and possibly by late August-early September (on autumn migration). They feed on seeds of various plants on the ground. They migrate singly, or in small flocks in western population like other desert finches.

Habitat Type: Potential habitats are 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.1., 4.4. on migration); 6. Rocky areas; 11. Artificial – Terrestrial (11.3., 11.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic,

1.3. Extraction- 1.3.1. Mining, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming, 6.2. Land pollution- 6.2.2. Domestic; 7. Natural disasters- 7.1. Drought, 7.3. Temperature extremes; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. They may migrate through protected areas and Important Bird Areas in western Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

440. Scientific Name: *Bucanetes mongolicus*

Species Authority: (Swinhoe, 1870)

Common Names: Mongolian Finch or Mongolian Trumpeter Finch (English), Mongol altanjiguur or Mongol altan jiguur (Mongolian)

Synonyms: *Eremopsaltria mongolicus* (Kirwan & Gregory, 2005); *Bucanetes mongolicus* (Cramp & Simmons 1977-1994); *Bucanetes mongolicus* (AERC TAC, 2003); *Rhodopechys mongolica* (BirdLife International, 2004); *Rhodopechys mongolica* (Sibley & Monroe, 1990& 1993).

Taxonomical Notes: *Rhodopechys mongolicus* (Sibley & Monroe, 1990&1993) has been transferred into the newly erected genus *Eremopsaltria* following Kirwan & Gregory (2005) who argue that all four 'desert-finches' warrant treatment within their own monospecific genera (BirdLife International, 2011).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Turkey; Russian Federation; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Bahrain; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia.

Regional Distribution: This species breeds in Achit and Uureg Lake valleys (Mongol-Altai Mountain Range); through southern Tannu-Ola and Northern Uvs Depression, south to the Depression, east to Telmen Lake region; to the main Khangai range (Uliastai town), further across northern Southern Khangai Plateau to Arvaiheer town, east to Tuul River valley and Erhit Mountain (upper Herlen River); from here to Zamyn-Uud including Ih Mountain (Eastern Gobi); surrounding mountains in Great Lakes Depression and Valley of the Lakes; Ih Bogd and Gurvansaikhan ranges (Gobi-Altai Mountain Range); Baruunkhurai Depression and mountains in Gobi (Trans-Altai, Northern, Alashani and Eastern) (nests only in mountains in Gobi) (Tugarinov, 1932; Tarasov, 1960; Fischer, 1970; Mauersberger, 1980&1982; Piechocki *et al.*, 1982; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding pairs nest in high mountain areas with rocks, cliffs and semi-arid scrub, rocky mountain slopes near water and rocky tundra with bushes in high mountains, mountain steppe, desert steppe and Gobi Desert (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Both adults build their nest, but female chiefly, on the ground in a small crevice or hollow sheltered by an overhanging rock or low bushes. The nest is a shallow cup, loosely made of thin, dry grass stems with some fibrous parts of dead leaves towards the inside and an inner cup of hair. The female usually lays 3-5 eggs of glossy pale blue or slightly greenish-blue colour with dark or darkish-brown specks or small spots. The female incubates the eggs and feeds the young on insects and seeds in the nest. Breeding ecology of the species has been poorly studied in Mongolia. They form flocks of 4-80 individuals and drink water from streams, spring, and other open water sources near high, rocky mountains in the steppe. They are primarily seed-eaters in spring, autumn and winter. The flocks feed on seeds on the ground and in bushes and tall plants. Altitudinal movements occur for this species, depending on food availability and snow cover in winter. Habitat Type: 3. Shrub-land (3.3., 3.4. during seasonal movements); 4. Grassland (4.1., 4.4.); 5. Wetlands (5.2., 5.3., 5.11. for drinking); 6. Rocky areas; 11. Artificial – Terrestrial (11.3., 11.4. only during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) both wintering and breeding sites/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in wintering and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon during seasonal movements/, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near wintering and breeding sites of the species have been negatively affecting the species.

Conservation Measures: Approximately 11.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

441. Scientific Name: *Uragus sibiricus*

Species Authority: (Pallas, 1773)

Common Names: Long-tailed Rosefinch (English), Uuren suultzana or uuren suul tzana (Mongolian)

Subspecies in Mongolia: *U. s. sibiricus* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Loxia sibirica* (Pallas, 1773)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Kyrgyzstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds through Khovd River (from Achit Lake to the lower part of the river) (Mongol-Altai Mountain Range); lower Torkholig (northern Uvs Lake) and Tes Rivers (from Bayantes sum to Northern Uvs Depression); through western Khangai Mountain (Eg River valley) (Khangai Mountain Range); eastern Hövsgöl Mountain Range; lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins); upper Minj, Tuul, Terelj, Onon, Balj, Huder, and Bulnai Rivers (Hentii Mountain Range); upper Herlen-Ulz Rivers (Mongol Daguur Steppe) (very scarce); Khalkh, Degee and Nömrög Rivers, and Ih Khyangan Mountains (Buir Lake-Khalkh River-Khyangan region). It is found in the breeding areas, open habitats with tall grass and bushes in river valleys and mountain slopes in Great Lakes Depression, north and western Khangai, Hövsgöl and Hentii Mountain Ranges, Middle Khalkh Steppe and Mongol Daguur Steppe and Eastern Mongolian Plain on winter movement (Berezovskii, 1881; Tugarinov, 1916; Kozlova, 1930&1932; Gagina, 1960; Kleinstäuber&Succow, 1978; Mauersberger, 1980&1982; Piechocki *et al.*, 1982; Stephan, 1988; Fomin & Bold, 1991; Smirenskii & Sumiya, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June, depending on weather conditions. Breeding pairs nest in trees and bushes in thickets and dense bushy areas in forest flood-lands and along lower mountain slopes in mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Breeding begins in late May-early June. Adult birds build their nest in deciduous trees (birch, poplar etc) 1-2 m above ground. The nest is constructed of dried grass, stems and other plant materials. The nest is lined with softer grass, hair and feathers. The female lays 3-6 eggs of intense greenish-blue colour with darkish spots and blotches. No information is available on incubation and fledging periods. Both adults feed young on insects, spiders, other terrestrial invertebrates and seeds in the nest. In winter they descend to low hillsides, river valleys, and low mountain slopes with deciduous forest and bushes, and planted deciduous trees, ascending to breeding sites by late March-early April. They form flocks consisting of 4-30 individuals and feed on seeds

of various plants on the ground and seeds of birch, poplar, willow and other deciduous trees.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.1.-5.8. , 5.11., 5.13.-5.17. for drinking); 11. Artificial – Terrestrial (11.3.-11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning during seasonal movements/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

442. Scientific Name: *Carpodacus erythrinus*

Species Authority: (Pallas, 1770)

Common Names: Common Rosefinch, Scarlet Rosefinch (English), Ulaavar bujmar (Mongolian)

Subspecies in Mongolia: *C. e. grebnitzkii* (see Svensson (1992); Clement *et al.* (1993); Howard & Moore (1994) for further details)

Synonyms: *Loxia erythrina* (Pallas, 1770)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, drought, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Morocco; Ireland; Portugal; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Hungary; Slovakia; Montenegro; Serbia; Greece; Romania; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Democratic People's Republic of Korea; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Turkmenistan; Seychelles; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Hong Kong; Taiwan, Republic of Korea; Japan.

Regional Distribution: This species breeds from upper Khovd River to southern Mönh Khairkhan, Kharkhiraa and Turgen Mountains (up to 2,400 m asl); south to Khavtag Range and Baitag Bogd (Mongol-Altai Mountain Range); lower Torkholig and Tes River valleys (Great Lakes Depression); Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range); Ulaan Taiga, Hövsgöl Lake valleys, Eg River and Darkhad Depression (Hövsgöl Mountain Range); Orkhon-Selenge River basins; Minj, Tuul, Terelj, Onon, Balj, Bulnai, and upper Herlen Rivers (Hentii Mountain Range); Khalkh, Degee, Nömrög Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, open dry habitats, river valleys and mountain slopes with bushes and trees in Valley of the Lakes, Baruunkhurai Depression; oases and bushy areas in Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Tugarinov, 1916; Kozlova, 1930&1932; Tugarinov, 1932; Kleinstäuber & Succow, 1978; Mauersberger, 1980; Piechocki *et al.*, 1982; Polyakov, 1912, 1982; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 40,000,000 - 350,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and non-breeding individuals arrive in summering and breeding sites by late April-early May. Breeding season begins by late May-early June. Breeding pairs nest in bushes and trees close to the ground with thickets and tall bushes, forest edges and mountain slopes with dense bushes and water points in mountain taiga forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female builds own loosely- built nest of plant stems and grass, lined with roots and hair. The female usually lays 3-6 eggs of glossy light blue colour with purplish-black spots, streaks or small blotches. The eggs are incubated by the female for 12-14 days. Both parents care for the young and feed them on terrestrial invertebrates and seeds for 11-17 days in the nest. Flocks of 6-80 individuals feed on seeds of various plants on the ground in open habitats, including planted green deciduous trees, vegetable fields and tall plants in the steppe and Gobi Desert. Their autumn migration begins by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti* and insecticide against forest insects)/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1.

Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon on migration/, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

443. Scientific Name: *Carpodacus pulcherrimus*

Species Authority: (Moore, 1856)

Common Names: Beautiful Rosefinch (English), Bulheree bujmar or bulheree bujirga (Mongolian)

Subspecies in Mongolia: *C. p. davidianus*, *C. p. argyrophrys* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Propasser pulcherrimus* (Moore, 1856)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Pakistan; India; China; Nepal; Mongolia; Bhutan.

Regional Distribution: This species breeds in Gurvansaikhan and Ih Bogd Mountains (Gobi-Altai Mountain Range); western Khangai range (Khangai Mountain Range); mountains in Tes River valley at Bayantes sum region (Kharkhad mountain range) (Great Lakes Depression). It has been recorded in the breeding areas, on mountain slopes with juniper scrub, thickets and short dense bushes in Mongol-Altai and Gobi-Altai Mountain Ranges, mountains in Great Lakes Depression and Gobi mountains (Trans-Altai, Alashani and SW Eastern Gobi) in winter (Kozlova, 1930&1932; Mauersberger *et al.*, 1980&1982; Stephan, 1988; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding habitats are bushes and thickets like juniper scrub near high rocks, cliffs, and streams on mountain slopes in high mountains (Bold *et al.*,

2005; Gombobaatar, 2012). Breeding pairs begin to breed by late May-early June, depending on weather conditions. Female builds own nest in bushes, sometimes in very low bushes such as juniper in high mountain ranges. The female lays 3-6 eggs with very pale bluish-green, or whitish-green tinged bluish with dark small spots at the larger end. The female incubates the eggs for 12-17? days. Both parents feed young on terrestrial insects and seeds of various plants. In breeding season, adult birds and fledglings like to visit creeks, springs and other open water points to drink and have a bath at midday. They occur in areas with dense bushes, scrub, and young deciduous trees in pairs and small flocks in/after breeding season. In winter they descend to low hillsides of high mountains and occur in open habitats in mountain valleys, and spring valleys with dense bushes and tall plants. They feed on seeds of various plants on the ground and in low bushes in winter.

Habitat Type: 3. Shrub-land (3.4. during seasonal movements); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.2., 5.3., 5.11. for drinking); 6. Rocky areas.

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in wintering and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, and drought both wintering and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 15.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

444. Scientific Name: *Carpodacus roseus*

Species Authority: (Pallas, 1776)

Common Names: Pallas's Rosefinch (English), Yagaan bujmar or yagaan bujirga (Mongolian)

Subspecies in Mongolia: *C. r. roseus* (see Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Fringilla rosea* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Denmark; Hungary; Russian Federation; Kazakhstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests on Kharkhira Mountain (up to 2,300 m asl) (Mongol-Altai Mountain Range); Tes River valley at Bayantes and Tes sums (Great Lakes Depression); Hövsgöl Mountain, east to Zelter River valley, Selenge province. Wintering records exist in breeding areas and across river flood-lands, birch groves, bushes and trees in Khasagt Khairkhan, the main Khangai and Hentii Mountain Ranges; east to Onon, Balj and upper Ulz River valleys (Berezovskii, 1881; Tugarinov, 1916; Kozlova, 1930; Mauersberger, 1980; Piechocki *et al.*, 1982; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown. Global breeding and resident ranges are estimated at 4,970,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are thickets and dense shrubs on upper limits of mountain taiga forests (Bold *et al.*, 2005; Gombobaatar, 2012). Breeding biology of the species has been poorly studied in Mongolia. According to Bold *et al.* (2005), female lays 3-6 eggs in the nest in a low bush. The female incubates the eggs. Both parents care for the young and feed them on insects, other terrestrial invertebrates, and seeds of various plants. From early to mid-November, they move down to forest steppe, river valley, and mountains with trees and bushes. They occur in pairs or small flocks and feed on seeds of plants on the ground in winter in Mongolia. Sometimes, they are found on mountain slopes with rocks, and cliffs with tall bushes and shrubs in the steppe. The flocks and pairs move higher up by late February –early March each year depending on seed and weather conditions.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.11. for drinking); 6. Rocky areas; 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest fires may burn their breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in wintering and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators including Saker Falcon during seasonal movements/, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

445. Scientific Name: *Carpodacus rhodochlamys*

Species Authority: (Brandt, 1843)

Common Names: Red-mantled Rosefinch (English), Artsny bujmar or artsny ulaavar shuvuu (Mongolian)

Subspecies in Mongolia: *C. r. rhodochlamys* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Pyrrhula rhodochlamys* (Brandt, 1843)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Mongolia.

Regional Distribution: This species breeds in Höh Serh massif (Mongol-Altai Mountain Range); western Khangai Mountain and isolated findings in Högnökhaan Mountain (Khangai Mountain Range). It is found in forested areas and open habitats near forest in Hövsgöl area (Sh.Boldbaatar pers. comm.), Buyant River valley (Mongol-Altai Mountain Range), the main mountain range in Khangai and Orkhon-Selenge River basins, upper Minj, Tuul, Terelj, Onon, Balj, upper Ulz and Herlen River valleys (Hentii Mountain Range) during altitudinal movements in winter (Berezovskii, 1881; Kozlova, 1930; Mauersberger *et al.*, 1980&1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding habitats are bushes and thickets such as junipers in high mountains, overgrown deciduous thickets and dense tall bushes in subalpine meadows (Bold *et al.*, 2005; Gombobaatar, 2012). Breeding ecology of the species is poorly known in Mongolia. The nest, a cup of twigs and dry grass lined with hair, is built by the female in spruce or in juniper at 0.5-14 m above ground. The female incubates 2-5 eggs of pale blue, whitish-blue tinged green colour with dark spots at the larger end. The female incubates the eggs alone for 14-18 days. The male brings food to the female and young chicks. Both parents feed juveniles for 15-16 days (Gavrilov & Gavrilov (2005). In winter, they descend to lowlands and feed on seeds and fruits of plants on the ground. In early spring they move back to a higher altitude.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.11. for drinking); 6. Rocky areas; 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements); 12. Artificial – Aquatic (12.6., 12.9. in winter).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of

human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /fires may burn their breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in wintering and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics, 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.2% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

446. Scientific Name: *Carpodacus rubicilla*

Species Authority: (Güldenstädt, 1775)

Common Names: Great Rosefinch, Caucasian Great Rosefinch or Severtzov's Rosefinch (English), Ulaan bujmar or ulaan bujirga (Mongolian)

Subspecies in Mongolia: *C. r. kobdensis*, *C. r. severtzovi* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Loxia rubicilla* (Güldenstädt, 1775)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Georgia; Azerbaijan; Kazakhstan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia.

Regional Distribution: This species breeds in Kharkhiraa, Turgen Mountain ranges and surrounding mountains of Achit Lake; Jargalant Khairkhan and Sutai Mountains, south to mountains in upper Uyench and Bodonch River valleys (Mongol-Altai Mountain Range) and Khavtag Mountain (Baruunkhurai Depression); possibly Höh Serh Mountain and Arts Bogd (Gobi-Altai Mountain Range); Khan Höhii Mountain (W Khangai Mountain Range). It is found in the breeding areas and overgrown thickets of mountain river valleys in Valley of the Lakes and Gobi (Trans-Altai, Alashani, and SW Eastern Gobi) in winter (during altitudinal movement) (Berezovskii, 1881; Kozlova, 1932; Tarasov, 1960; Mauersberger, 1980&1982; Piechocki *et al.*, 1982; Potapov, 1986; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in late May-early June. Breeding pairs nest in crevices of rocky slopes and cliffs with bushes and scrub near water, in a low bush, and sometimes between rocks in alpine meadows in treeless mountain regions no lower than 2,000 m asl. The nest is a cup of twigs, roots, grass and moss, lined with wool and hair. The female usually lays 4-5 eggs of glossy light blue colour with bold dark spots and fine specks at the larger end, and sometimes some deep lavender marks. Breeding ecology of the species is poorly known in Mongolia. However, both parents care for and feed young on terrestrial insects, spiders and other invertebrates, and seeds. After the breeding season, they form flocks consisting of 4-30 individuals and feed on seeds and fruits on the ground and in trees in plantations and forests in lake and river valleys. Perching and roosting birds in tree occurred during seasonal movements and in winter. In winter, they descend to plantations, river valleys and low hillsides with trees and bushes, ascending to breeding sites by mid-April, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4. during seasonal movements); 3. Shrub-land (3.4. during seasonal movements); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.1.-5.8. , 5.11., 5.13.-5.17. for drinking); 6. Rocky areas; 11. Artificial – Terrestrial (11.3.-11.5.).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticide used against forest insects during seasonal movements/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 14.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

447. Scientific Name: *Pinicola enucleator*

Species Authority: (Linnaeus, 1758)

Common Names: Pine Grosbeak (English), Narsny shurshuu or narsny bujirga (Mongolian)

Subspecies in Mongolia: *P. e. kamtschatkensis*, *P. e. Pacatus* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Loxia enucleator* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest

fire, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Saint Pierre and Miquelon; Bermuda; Greenland; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Switzerland; Denmark; Austria; Sweden; Czech Republic; Poland; Hungary; Slovakia; Montenegro; Serbia; Finland; Latvia; Ukraine; Russian Federation; Kazakhstan; China; Mongolia; Democratic People's Republic of Korea; Japan.

Regional Distribution: This species breeds at Yolt River and north-western Mongol-Altai to upper Khovd River (Mongol-Altai Mountain Range); the main mountain ranges in Khangai, Hövsgöl and Hentii. Birds occur in the breeding areas, and forests in mountains and river valleys in Great Lakes Depression (Northern Uvs Depression), northern Khangai and Hövsgöl ranges including Darkhad Depression, through Orkhon-Selenge River basins, Upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, Herlen Rivers (Hentii Mountain Range) and upper Ulz River, western Mongol Daguur Steppe (Molleson, 1906; Kozlova, 1930; Mauersberger, 1980; Piechocki *et al.*, 1982; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Sumiya, 2006).

Population: The global population consists of 4,000,000 mature individuals. Global breeding and resident ranges are estimated at 19,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding begins in mid-May-early June. Breeding pairs nest in branches of coniferous trees in coniferous and mixed forest in mountain taiga forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). The nest is a loose structure of twigs with an inner cup of fine roots, grass and moss. The female usually lays 4, sometimes 3-5 eggs of moderately glossy deep light blue colour with black and purplish-brown spots or small blotches and more profusely marked with pale lilac or purplish speckling or spotting. Often most heavily marked at the larger end. The female incubates the eggs for 13-14 days. Both parents feed the young on insects and seeds for c. 14 days (Harrison, 1975). The food is regurgitated. They forage in coniferous trees and rarely bushes. In winter, they mainly eat seeds, buds, and berries. Outside nesting season, they often feed in flocks. In winter, they descend to forest steppe, river valleys and mountain forest at low altitude, sometimes planted trees in towns and cities. By late February-early March, they ascend to the breeding sites.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/;

10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport / transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

448. Scientific Name: *Loxia curvirostra*

Species Authority: Linnaeus, 1758

Common Names: Red Crossbill, Common Crossbill, or Crossbill (English), Gatsuuryn solbinkhushuut or gatsuuryn zagalmai byalzuukhai (Mongolian)

Subspecies in Mongolia: *L. c. altaiensis*, *L. c. japonica*, *L. c. curvirostra* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Mexico; Guatemala; El Salvador; Belize; Honduras; Nicaragua; Saint Pierre and Miquelon; Bermuda; Greenland; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Russian Federation; Cyprus; Israel; Jordan; Georgia; Armenia; Azerbaijan; Kazakhstan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Bhutan; Myanmar; Viet Nam; Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at Yolt and upper Khovd Rivers, Tes River between Bayantes and Tes sums (Mongol-Altai Mountain Range); the main Khangai, Hövsgöl (north valley of Eg River) and Hentii Mountain Ranges; Orkhon-Selenge River basins (Khantai and Buteeliin Nuruu), east to Onon and Balj Rivers. It winters in the breeding areas, forested areas in mountain, patchy woodland in the steppe and valleys of Uliastai River (Mongol-Altai), Ih Bogd and Gurvansaikhan Mountains (Gobi-Altai), Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain and Khalkh River valley (Buir Lake-Khalkh River-Khyangan region) (Kozlova, 1930&1932; Gagina 1960; Mauersberger, 1980&1982; Potapov, 1986; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tsevenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 30,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 24,400,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. The crossbills are characterised by the mandibles crossing at their tips, which gives the group its English name. They are specialist feeders on conifer cones, and the unusual bill shape is an adaptation to assist in the extraction of seeds from the cone. Breeding pairs nest in branches near the main trunk of coniferous tree 1.8 -12 m high in coniferous and mixed forest in high mountain forest, mountain taiga forest, forest steppe (Bold *et al.*, 2005; Gombobaatar, 2012). The basal nest cup is made of pine twigs, built up with grasses, moss, lichen and wool, and with a finer inner cup of fine grass, hair, fur and feathers. The female usually lays 3-4, sometimes 2-5 eggs of glossy pale blue or bluish-white colour with purple or purplish-black, and fainter pale pink specks, spots and short scrawls at the larger end. The eggs are incubated by the female only, beginning with first egg at 13-16 days. For about a week the female broods the young while the male brings food, later both parents bring food to the young. They feed the young on seeds of plants. The young leave nest at 17-22 days, but depend on adults for 3-4 weeks afterwards (Harris, 1975). This species forms flocks outside the breeding season and moves down to river valleys, forest edges and planted trees in towns and cities. They feed on seeds on the top of coniferous trees, sometimes with Pine Grosbeak in winter. Late February-early March, they ascend to the breeding sites, depending on food availability, snow cover and air temperature.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires / forest fires may burn their breeding habitats and nests with eggs and occasionally young/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/-6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

449. Scientific Name: *Loxia leucoptera*

Species Authority: Gmelin, 1789

Common Names: White-winged Crossbill or Two-barred Crossbill (English), Tolit solbinkhushuut or hurdeg zagalmai byalzuukhai (Mongolian)

Subspecies in Mongolia: *L. l. bifasciata* (see Svensson (1992); Clement *et al.* (1993); Howard & Moore (1994) for further details)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It is known to breed in few numbers in a restricted area of eastern Mongolia. The population size for Mongolia is unknown; therefore, until further information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Jamaica; Saint Pierre and Miquelon; Bermuda; Greenland; Ireland; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Switzerland; Denmark; Austria; Sweden; Czech Republic; Slovenia; Poland; Hungary; Slovakia; Montenegro; Serbia; Romania; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Russian Federation; Kazakhstan; China; Mongolia; Republic of Korea; Japan.

Regional Distribution: This species nests in trees in coniferous forest in mountain taiga in the main Hentii Mountain Range (upper Onon and Balj River valleys). It is found in the breeding area and forested areas in Khan Taishir Mountain (Gobi-Altai Mountain Range) during seasonal movements (Berezovskii, 1881; Tarasov, 1960; Kleinstäuber & Succow, 1978; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2005a). B.Delgermaa (MOS) photographed an adult male on the ground near Chukh Lake tourist resort in Dashbalbar sum of Dornod province in early May, 2009 (B.Delgermaa pers. comm. and photograph). S.Gombobaatar, Dr Bernd Nicolai and his team from Museum Heineanum, Halberstadt in Germany photographed an adult female on a willow tree near sandy precipice of Ulz River (app. 20 km W Dashbalbar sum of Dornod province) on 13 July, 2009 (S.Gombobaatar pers. comm. and photographs). One adult male was seen and photographed by A.Bräunlich and Ch.Uuganbayar in coniferous forest at Manzshir monastery, Bogd Khaan Mountain, Sergelen sum of Töv province on 28 January, 2007 (Ch. Uuganbayar pers. comm.; www.birdsmongolia.blogspot.com).

Population: The global population consists of 40,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a resident breeder. It has a strong preference for Siberian Larch (*Larix sibirica*) and pine trees. Breeding habitats are coniferous forest in Mongolia. It nests in conifers trees at 2-10 m high. A base nest cup is built of pine twigs, grasses, moss and wool. Inner cup lined with finer grass, hair, and feathers. Female lays 3-5 eggs of glossy very pale blue or bluish-white colour with purplish black, darkish, or pale pink specks, and spots. The female incubates the eggs for 13-16 days. At the early stage of chick development, the female broods and feeds the young on seeds. Later both parents feed the young together. The young leave nest at 16-21? days. This species forms flocks and descends to river valleys, forest edges, planted trees in towns and cities, and steppe with scattered trees and bushes in the non-breeding season. According to field observations, they may migrate short distances or move long distances in winter, depending on food availability, snow cover, and air temperature.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration and seasonal movement); 5. Wetlands (5.1., 5.2., 5.5.-5.8. only for drinking); 6. Rocky areas (on migration and seasonal movement); 11. Artificial – Terrestrial (11.3., 11.4., 11.5.).

Dominant Threats: Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest fires may burn breeding habitats;/ 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have

been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 28.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

450. Scientific Name: *Pyrrhula pyrrhula*

Species Authority: (Linnaeus, 1758)

Common Names: Eurasian Bullfinch, Bullfinch, Common Bullfinch or Northern Bullfinch (English), Egel zana or zana (Mongolian)

Subspecies in Mongolia: *P. p. pyrrhula*, *P. p. cineracea* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994) for further details)

Synonyms: *Loxia pyrrhula* (Linnaeus, 1758)

Taxonomical Notes: Based on morphological and ecological features, Stepanyan (1978, 1990&2003), Fomin & Bold (1991), Dawaa *et al.* (1994), Gavrilov (1999), Gavrilov & Gavrilov (2005), Bold *et al.* (2007) and Gombobaatar (2009) have treated as a separate species *Pyrrhula cineracea* Cabanis, 1872 (Baikal Bullfinch or Oriental Bullfinch in English and bor zana in Mongolian). However, most recent taxonomical references (Brazil, 2009; Arlott, 2009; BirdLife International, 2010) have not supported the separation.

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by forest fire, logging, mining and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Russian Federation; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Uzbekistan; Kyrgyzstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species nests across the main ranges of Khangai and Hentii Mountains. It winters in the breeding areas and moves down to river valleys with forest and the edge of forest and gardens at Tes River (Bayantes sum), Khan Höhii, Tarvagatai and Bulnai Mountains (northern Khangai Mountain Range), Hövsgöl Lake and Eg River, Darkhad Depression (Hövsgöl Mountain Range), Lower Orkhon, Selenge, Eg, Kharaa and Yeröö Rivers (Orkhon-Selenge River basins), upper Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai and Herlen Rivers (Hentii Mountain Range); Herlen-Ulz River basins, Middle Khalkh Steppe and Mongol Daguur Steppe (very scarce); Khalkh, Degee, Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region) in winter (Berezovskii, 1881; Tugarinov, 1916; Kozlova, 1930; Gagina, 1960; Kleinstäuber&Succow, 1978; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Stepanyan, 1978, 1990 and 2003; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Regional distribution of *Pyrrhula pyrrhula cineracea*. In Mongolia, this species winters and breeds in coniferous and mixed forest with thickets, possibly in Khan Höhii, Tarvagatai and Bulnai Mountains (Khangai Mountain Range). It also occurs in upper Minj, Tuul, Terelj, Onon, Balj, and Herlen River valleys (Hentii Mountain Range), N Great Khyangan (Dawaa *et al.*, 1994; Stepanyan, 1978, 1990 and 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005). Approximately 9.9% of the species' range in Mongolia occurs within protected areas. One bird was photographed near Khovd town on 30 October, 2007 (A.Bräunlich & A.Laurie's pers. comm.).

Population: The global population consists of 45,000,000 - 150,000,000 mature individuals. Global breeding and resident ranges are estimated at 18,000,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder. Breeding habitats are tall trees in mixed and coniferous forest, in mature forest with undergrowth and thickets in mountain forest taiga, forest steppe and river valleys in taiga forest (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female builds own nest 1.2-2.1 m high in deciduous trees, bushes or shrubs. The nest is a loose structure of fine twigs, moss and lichen. Inner cup is made of roots and hair. The female usually lays 4-5 eggs of glossy light blue colour with blackish-purple, purplish brown and pale lilac spots, small blotches and scrawls at or around the larger end. The female incubates the eggs for 12-14 days. Female broods young while the male brings food for first 6 days, later both bring food. Both parents feed the young for 12-18 days in the nest (Harris, 1975). In the non-breeding season, they chiefly feed on seeds, fruits and buds of various plants on the ground or in trees and bushes. In winter, they occur in pairs or family flocks of 4-8 individuals and descend to forest steppe, river valleys with trees, and planted trees in towns and cities by late November-early February. The flocks join with Hawfinch and Bohemian Waxwings in winter in Mongolia.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.1., 5.2., 5.5.-5.8. only for drinking); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest fires may burn their breeding habitats and nests with eggs and occasionally young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals, insecticide used against forest insects/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling

of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

451. Scientific Name: *Coccothraustes coccothraustes*

Species Authority: (Linnaeus, 1758)

Common Names: Hawfinch or Eurasian Hawfinch (English), Bankhar buljuukhai or höhölt höh boljmor (Mongolian)

Subspecies in Mongolia: *C. c. coccorhraustes* (see Clement *et al.* (1993); Howard & Moore (1994) for further details)

Synonyms: *Loxia coccothraustes* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Mongolia; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in E Hövsgöl Mountain Range across Eg and Selenge River basins (Teshig sum, Zelter River valley, Khantai and Buteel mountains) (Orkhon-Selenge River basins) and upper Minj, Tuul, Terelj, Onon, Balj and Herlen Rivers (Hentii Mountain Range). It migrates through the breeding areas, forested areas in mountains, river valleys and open dry habitats with tall cover, mountain slopes with bushes, rocks and gardens in settlements (Gombobaatar, 2012) in Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Baruunkhurai Depression and oases in Gobi (Trans-Altai, Alashani, Northern and SW Eastern Gobi (Kozlova, 1930; Gagina, 1960; Kleinstäuber & Succow, 1978; Mauersberger, 1980&1982; Piechocki *et al.*, 1982; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003;

Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006). It winters in river valleys and open dry habitats with tall cover, bushes, rocks and gardens in towns and cities such as Ulaanbaatar, Sukhbaatar and Mörön towns.

Population: The global population consists of 15,000,000 - 50,000,000 mature individuals. Global breeding and resident ranges are estimated at 12,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder and partial migrant. Most breeding and non-breeding birds arrive in their breeding and summering sites by late April - mid-May. Breeding begins in late May-early June. Female builds own nest in deciduous trees at 1-5 m height in deciduous and mixed forests, patchy woodland and mixed trees along river valleys in mountain taiga forest, forest steppe and river basins (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a cup of twigs, roots and lichens, lined with finer roots, plant fibers and hair. The female usually lays 5, sometimes 2-7 eggs of slightly glossy light blue, or greyish-green, rarely pale buff or grey colours with bold dark brown spots and scrawls and paler scribbling towards the larger end. The eggs are incubated by the female alone for 9-14 days. Both parents feed young on seeds and fruits of different plants. The young can leave nest at 10-14 days. The food is mainly seeds and fruit kernels in both breeding and non-breeding seasons. In the non-breeding season, they occur in pairs or small groups consisting of 5-16 individuals. The flocks feed on seeds on the ground and occur in areas with tall plants and bushes in open desert steppe and steppe on migration. In breeding and non-breeding seasons, birds visit open water points near feeding and breeding sites. They descend to forest steppe, river valleys with forest, and planted trees in towns and cities.

Habitat Type: 1. Forest (1.1., 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (5.1., 5.2., 5.5.-5.8. only for drinking); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining / gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and wintering sites are major disturbances for the species/, 1.7. Fires /forest fires may burn their breeding habitats and nests with eggs and young/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals, insecticide used against forest insects/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon during seasonal movements, and Eurasian Sparrowhawk and Northern Goshawk in breeding areas/, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Fringillidae

452. Scientific Name: *Eophona migratoria*

Species Authority: Hartert, 1903

Common Names: Yellow-billed Grosbeak, Chinese Grosbeak or Black-tailed Hawfinch (English), Naran sharshuu or sharshuu boljmor (Mongolian)

Subspecies in Mongolia: *E. m. migratoria* (see Clement *et al.* (1993); Howard & Moore (1994); Dawaa *et al.* (1994); Wild Bird Society of Japan (2000) for further details)

Synonyms: *Loxia melanura* (Gmelin, 1789); *Coccothraustes migratorius* (Hartert, 1903)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It is known to breed in small numbers in a restricted area of eastern Mongolia. The population size for Mongolia is unknown; therefore, until further information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; China; Mongolia; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species is found in Nömrög River valley and migrates through Ih Khyangan Mountain range (Buir Lake-Khalkh River-Khyangan region) (Fomin & Bold, 1991; Smirenskii *et al.*, 1991; Dawaa *et al.*, 1994). German biologists, N.Batsaikhan, S.Gombobaatar and S.Enkhbold found a pair of the species in dense bushes and fruit trees near Nömrög River at "German Tokhoi", NW military base camp in early June, 1995 (German-Mongolian expedition Dornod, 1995). S.Gombobaatar and P.Amartuvshin observed and photographed one bird in a planted poplar tree in Bor-Öndör town of Hentii province on 8 June, 2009. This bird was sitting in a tree together with 2 males and 5 females of Common Rosefinch. One day later, the birds left the site.

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, it was found in deciduous young forest and dense bushes in Nömrög River valley. Team members of the German-Mongolian expedition Dornod (1995) observed and photographed a pair of the species at exactly the same site where D.Sumiya and Smirenskii found one in 1989 (Smirenskii *et al.*, 1991). From these data, we concluded that this species may breed in the area. However, there is no proof of this. This species might arrive in the site by late April-early May (the same as other migrants) and leave the site for wintering grounds by late August-early September, depending on food availability and weather conditions. According to Dementiev *et al.* (1954), this species nests in dense deciduous trees, including Elm, 1.5-2 m from the ground. The nest is placed almost at the top of the tree and is covered by leaves. The nest materials are dried grasses, stems and tiny twigs. The female lays 3-5 eggs of pale blue colour with purplish black, pale purplish grey spots and blotches at the larger end. The male brings food to young and female at first. Later both parents feed the young on insects and seeds. They occur in pairs and small flocks on migration.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 11. Artificial – Terrestrial (11.3., 11.4., 11.5. during seasonal movements).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.7. Fires /forest fires may burn breeding habitats/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 31.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

453. Scientific Name: *Emberiza citrinella*

Species Authority: Linnaeus, 1758

Common Names: Yellowhammer or Yellow bunting (English), Altan hömrög (Mongolian)

Subspecies in Mongolia: *E. c. erythrogegens* (see Howard & Moore (1994); Dawaa *et al.* (1994); Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging, drought, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Republic of Korea; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Andorra; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Liechtenstein; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; United Arab Emirates; Uzbekistan; Afghanistan; Tajikistan; Kyrgyzstan; China; Nepal; Mongolia; Japan. It has been introduced to Australia and New Zealand.

Regional Distribution: This species breeds at Orkhon River near Khujaa Shaamar, Selenge province (T. Stenzel & S.Gombobaatar pers. comm. and photographs). It migrates and possibly winters in the breeding area, in deciduous forest with fruit trees, bushes and thickets in Hövsgöl Mountain Range, Orkhon-Selenge River basins and upper Minj, Tuul, Terelj, Onon, Balj, Herlen Rivers (Hentii Mountain Range) and upper Ulz River (Kozlova, 1930; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population consists of 70,000,000 - 200,000,000 mature individuals. Global breeding and resident ranges are estimated at 12,900,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a breeding visitor and possibly wintering species. Most individuals arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. Breeding habitats are open thin forest thickets and tall bushes, willow trees in forest steppe and lake and river valleys. Breeding pairs nest usually on the ground hidden in grass or at the edge of some taller bushes or young trees. Sometimes the nest is situated in a thick bush a few feet up. The nest is a cup of grass, plant stems, and moss lined with hair and fine grass. The female usually lays 3-5, sometimes 2-6 eggs of glossy white, tinted bluish, or greyish colour with pale purple-grey or reddish-purple spots, or dark or purplish-brown sparse bold irregular small blotches. The eggs are incubated by the female for 11-14 days. The chicks leave the nest at 9-14 days and can fly at c. 16 days (Harris, 1975). Both parents care for and feed young on terrestrial arthropods (mayflies, grasshopper, Hemiptera, spiders, caterpillars, flies, beetles, also earthworms), and their larvae. In the non-breeding season, it feeds on cereals and large grass seeds as well as on other seeds, which they typically pick from the ground. On migration, they form flocks, often in mixed species groups with other seed-eating birds, and perch on stems of tall plants and small bushes. They leave the breeding site for wintering grounds by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Live-stock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly to the species in breeding and non-breeding areas/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 5.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

454. Scientific Name: *Emberiza leucocephalos*

Species Authority: Gmelin, 1771

Common Names: Pine Bunting (English), Tsagaanshanaat hömrög or tsagaan shanaat hömrög (Mongolian)

Subspecies in Mongolia: *E. l. leucocephalos* (see Howard & Moore (1994); Byers *et al.* (1995) for further details)

Synonyms: *Emberiza leucocephala* Gmelin, 1771

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Spain; United Kingdom; Gibraltar; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Hungary; Montenegro; Serbia; Greece; Finland; Ukraine; Bulgaria; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Iraq; Islamic Republic of Iran; Kazakhstan; United Arab Emirates; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in upper Khovd River to upper Bulgan River, Mönh Khaikhan massif and Kharkhiraa and Turgen Mountains (Mongol-Altai Mountain Range); lower Torkholig and Tes Rivers (Bayantes sum, Uvs province) and northern Uvs Lake to the country border (Northern Uvs Depression and Great Lakes Depression); from Khan Höhii Mountain across Khangai and Hövsgöl Mountain Ranges, Orkhon-Selenge River basins, east to Hentii Mountain and Ereen mountain (middle Ulz River) to Ulz and Döch River valleys, north to the country border (Khangai, Hentii Mountain Ranges and Mongol Daguur Steppe); upper Minj, Tuul, Terelj, Onon, Balj, Huder and Herlen Rivers (Hentii Mountain Range). It migrates through the breeding areas, forested areas, river valleys with dense tall bushes and open dry habitats on mountain slopes with rocks and tall vegetation (Gombobaatar, 2012) on Mongol-Altai and Gobi-Altai Mountain Ranges, Great Lakes Depression, Baruunkhurai Depression, Southern Khangai Plateau, east to Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, (Buir Lake-Khalkh River-Khyangan region); oases and mountain valleys in Gobi (Trans-Altai, Northern Gobi, Alashani and SW Eastern Gobi) (Molleson, 1906; Tugarinov, 1916; Kozlova, 1930&1932; Gagina, 1960; Grummit, 1961; Kleinstäuber & Succow, 1978; Mauersberger, 1980&1982; Polyakov, 1912 *et al.*, 1982; Piechocki *et al.*, 1982; Potapov, 1986; Rogacheva *et al.*, 1988; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Most breeding and non-breeding individuals arrive in breeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are coniferous or birch forest, scrub, or open country, often near water. Breeding pairs nest on the ground among grass and in overgrown bushes and young dense trees in coniferous, mixed forests, edges of mountain taiga forest, forest steppe and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). Female builds own nest, a cup of dead grass lined with hair and fine grass. The female lays 3-6 eggs of pale whitish-blue colour with purplish and greyish colour with dark or reddish-brownish fine and faint spots and blotches, sparsely marked. The female incubates the eggs for 12-14? days. Both parents care for and feed the young on terrestrial insects and larvae. The chicks leave the nest at 10-15? days. On migration, they form flocks consisting of 5-25 individuals and migrate through open areas with tall grasses and bushes in mountain, mountain steppe, steppe and desert steppe, and also edges of wetlands. They leave their breeding site for wintering grounds by late August-early September. Hybrids between Pine Bunting and Yellowhammer show a mixture of characters. One such bird, a vagrant in Suffolk, England in 1982, the "Sizewell bunting", is documented and illustrated with photographs in British Birds (Lansdown & Trevor, 1990). However the hybrids have not been recorded in Mongolia yet.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas; 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting (hunting or gathering) -3.5. Cultural, scientific, or leisure activities -3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed as souvenirs/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as insecticides are causes of individual poisoning on migration and breeding season/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought / due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk/, 8.3. Prey or food base / a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought in both non-breeding and breeding seasons/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport / transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

455. Scientific Name: *Emberiza cia*

Species Authority: Linnaeus, 1766

Common Names: Rock Bunting (English), Tsagaanhömsögt hömrög or tsagaan hömsögt hömrög (Mongolian)

Subspecies in Mongolia: *E. c. omissa*, *E. c. par* (see Howard & Moore (1994); Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into taxonomy, population size and trends, biology and ecology, habitat status, threats, species' range, and migration patterns.

History: 2009-

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Morocco; Portugal; Spain; Algeria; United Kingdom; Gibraltar; France; Andorra; Belgium; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Monaco; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; San Marino; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Ukraine; Bulgaria; Turkey; Russian Federation; Cyprus; Israel; Palestinian Territory Occupied; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia.

Regional Distribution: This species breeds in Höh Serh massif south to Mönh Khairkhan massif (up to 2,700 m asl) and Jargalant Khairkhan Mountain (1,900 to 2,200 m asl) (Mongol-Altai Mountain Range). It migrates through the breeding areas, open dry habitats in mountain valleys with bushes, scattered trees, forested areas in mountain ranges and river valleys with tall bushes and deciduous trees in Gobi-Altai Mountain Range, Tes River valley, Khangai Mountain Range including Southern Khangai Plateau, Hövsgöl Mountain Range Baruunkhurai Depression; mountain slopes with bushes in Gobi (Polyakov, 1912 *et al.*, 1982; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Sumiya, 2006; Boldbaatar, 2008). Regarding the references and field observations, proper documentation of breeding records of the species in the country is required.

Population: The global population consists of 10,000,000 - 50,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in their breeding and non-breeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are high mountains, rocky slopes with some scrub, thickets and scattered trees, and boulders with tall grass, sometimes alpine meadows below the tree line in high mountains, mountain taiga and forest. Female builds own nest in a cavity among rocks, or on a stony slope, rarely in low bushes among stones. The nest is a cup of grass, strips of bark and moss, lined with roots and hair. The female lays 4-6 eggs of slightly glossy pale grey or bluish-white colour with dark, or black lines, or fainter blurred markings. The female incubates the eggs alone for 12-13 days. The young leave the nest at 10-13 days (Harris, 1975). Both sexes care for and feed the young on terrestrial arthropods (grasshoppers, beetles, spiders, flies etc) and their larvae. In the non-breeding season they feed on seeds of various plants. In autumn they form small flocks consisting of 3-6 individuals, and occur in open habitats in mountain, steppe and lake and river valleys with bushes and tall plants. They leave the breeding site for wintering grounds by late August-early September, depending on weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas; 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species;/ 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing;/ 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season;/ 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species and seeds caused by habitat loss, use of insecticides, and drought both breeding and non-breeding seasons/.

Conservation Measures: Approximately 6.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

456. Scientific Name: *Emberiza godlewskii*

Species Authority: Taczanowski, 1874

Common Names: Godlewski's Bunting or Godlewski's Rock Bunting (English), Godlevskiin hömrög (Mongolian)

Subspecies in Mongolia: *E. g. godlewskii* (see Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging, drought, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; India; China; Mongolia; Myanmar.

Regional Distribution: This species breeds in Ih Bogd, Baga Bogd, Arts Bogd, Gurvansaikhan, Hurh, Noyon Bogd, Tost and other neighbouring mountains (up to 2,200 m asl) (Gobi-Altai Mountain Range); western and eastern Hövsgöl, east to Buteel Range, western Khangai Mountain Range and Uliastai town, Southern Khangai Plateau and Hentii Mountain Range. It moves and migrates down to river valleys, steppe mountain slopes with rocks and tall bushes and open dry habitats with scattered tall bushes in Great Lakes Depression, Hentii Mountain Range (Onon, Balj and Ulz River valleys), Baruunkhurai Depression and Gobi (Trans-Altai, Alashani and SW Eastern Gobi) (Kozlova, 1930&1932; Mauersberger, 1980; Rochagovskii *et al.*, 1988; Stubbe *et al.*, 1993; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Boldbaatar, 2002; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tsevenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding birds arrive in their breeding and summering sites by late April-early May. Breeding season continues from May-July. Breeding habitats are dry rocky hill-sides and ravines with scrub, close to forest and mountain rivers and streams in high mountains (Bold *et al.*, 2005; Gombobaatar, 2012). Female builds own nest on the ground or rarely at base of bushes and tall grasses. The nest is situated in a hollow and is a cup built of grass, roots, and moss, lined with roots and hair. The female lays 4-6 eggs of slightly glossy pale greyish or bluish pale grey colour with dark or dark brown lines, or blurred markings. The female incubates the eggs alone for 11-14? days. Both adults care for and feed the young on terrestrial arthropods (grasshoppers, beetles, spiders, flies etc) and their larvae. They eat seeds of various plants in non-breeding and migration seasons. After the breeding season, they form flocks consisting of 6-20 individuals and migrate through open habitats of mountains, steppe and lake and river valleys with bushes and tall plants. They leave the breeding site for wintering grounds by late August-early September, depending on food and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas; 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock-1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause

of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution-6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 11.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

457. Scientific Name: *Emberiza cioides*

Species Authority: Brandt, 1843

Common Names: Meadow Bunting or Siberian Meadow Bunting (English), Sharhömsögt hömrög or shar hömsög hömrög (Mongolian)

Subspecies in Mongolia: *E. c. tarbagataica*, *E. c. cioides*, *E. c. weigoldi* (see Howard & Moore (1994); Dawaa *et al.* (1994); Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Kazakhstan; Kyrgyzstan; China; Mongolia; Hong Kong; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds from Khan Höhii across the main Khangai and Hentii Mountain Ranges to upper Onon and Balj River valleys, north to the country border, south to the northern Khangai range, Tuul and upper Herlen River valleys (Khangai, Hövsgöl and Hentii Mountain Ranges); Khalkh River valley (Buir Lake-Khalkh River-Khyangan region); possibly Ih Bogd, east to Hurh Mountain (Gobi-Altai Mountain Range). It winters in the breeding areas, dry mountain slopes with bushes and rocks in Orkhon-Selenge River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain and Gobi (Dzungar, Trans-Altai, Northern, Alashani and Eastern Gobi) (Berezovskii, 1881; Tugarinov, 1916; Kozlova, 1930; Gagina, 1960; Kleinstäuber&Succow, 1978; Mauersberger, 1980&1982; Piechocki *et al.*, 1982; Potapov, 1986; Sumiya&Skryabin, 1989; Fomin &

Bold, 1991; Smirenskii *et al.*, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a resident breeder and partial migrant. Breeding season continues from May-July. Breeding habitats are tall grasses and bushes under rocks and very rarely at base of tall grasses and bushes in dry mountain slopes with thickets, scattered bushes, tall cover, boulders and high rocks and cliffs at the edge of mountain taiga forest, forest steppe, mountain slopes in dry mountain steppe and desert steppe (Bold *et al.*, 2005; Gombobaatar, 2012). Pairs use the same area for breeding several years in a row. Female builds own nest in very low bushes or mostly on the ground under rocks and bushes. The nest cup is made of dried grass, strips of bark and moss, lined with roots and hair. The female lays 3-5 eggs of slightly glossy pale grey, bluish pale grey, whitish pale grey colour with dark grey, or dark brown lines, or blurred markings. The female incubates the eggs alone for 11-12 days. The young leave the nest at 11-13 days. Both parents feed the young on grasshoppers, beetles, spiders, flies, and their larvae. They feed on seeds of various plants in the non-breeding season. In late autumn and winter, they live in small groups of 3-12 individuals, occurring in open habitats in mountain, mountain steppe and lake and river valleys with rocks, cliffs, bushes and tall plants.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. during seasonal movements); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only during seasonal movements); 6. Rocky areas; 11. Artificial – Terrestrial (11.3., 11.4. only during seasonal movements).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Sparrowhawk and Red Fox (*Vulpes vulpes*) prey on the species/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

458. Scientific Name: *Emberiza jankowskii*

Species Authority: Taczanowski, 1888

Common Names: Rufous-backed Bunting or Jankowski's Bunting (English), Yankovskiin hömrög (Mongolian)

Global Status: Endangered

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russia; China; Mongolia; North Korea.

Regional Distribution: This species is found in dry open habitat along low hills with overgrown bushes and tall grass in mountains of Khalkh and Nömrög River valleys (Mauersberger, 1978; D.Sumiya pers. comm.). Uncertain records are in S Alashani and Eastern Gobi in winter.

Population: The global population consists of 250-999 mature individuals. Global breeding and resident ranges are estimated at 233,000 km². The total population is likely to be fewer than 500 pairs, assuming that there are currently unknown populations remaining elsewhere, but may now be considerably fewer than 200 pairs. In China, the breeding population at three sites in Jilin province was estimated at 330-430 pairs in 1994, and in the first half of the 20th century it was locally common in Heilongjiang, however there are very few recent records and it seems to have disappeared or drastically declined at most of its known sites. It is believed to be extinct in eastern Jilin, and in 2008 breeding was known from a total of only four sites. At Huichin (south-western Jilin) 350 pairs were recorded in 1994 but none could be found in 2005. No birds have been recorded at Xianghai Nature Reserve since 2003, while at Baicheng the population declined from 100 individuals in 2001 to only two in 2008. At Dagang Forestry, western Jilin, the population crashed between 1999-2002 from c.55 pairs to c.15 pairs and remained relatively constant at around 15 pairs from 2002-2006. The only other currently known sites are Tumiji (possibly fewer than 50 birds) and Keerqin (43 individuals recorded in a brief survey in 2008) (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. This species is found in open habitats with scattered scrub or small trees in the east and Gobi Desert. They possibly migrate through the habitats by late April-early May (on spring migration) and late August-early September (on autumn migration) the same as other migrants. However, the record in the Gobi Desert in winter is doubtful. More accurate observations for the species in the country are urgent. It is almost identical to male Meadow Bunting *Emberiza cioides*. However, male Meadow Bunting lacks dark belly patch, has black ear-coverts, and indistinct greyish brown wing-bar. It feeds on seeds of various plants, berries, and other plant matter.

Habitat Type: Potential habitats are 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to

global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding sites/; 8. Changes in native species dynamics/.

Conservation Measures: Approximately 27.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

459. Scientific Name: *Emberiza buchanani*

Species Authority: Blyth, 1844

Common Names: Grey-necked Bunting (English), Höhlöriin hömrög (Mongolian)

Subspecies in Mongolia: *E. b. neobscura* (see Howard & Moore (1994); Byers *et al.* (1995) for further details)

Synonyms: *Emberiza huttoni*, *Emberiza cerruti* (Blyth, 1844)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Turkey; Russian Federation; Syrian Arab Republic; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; China; Mongolia; Bhutan; Hong Kong.

Regional Distribution: This species breeds from Mönh Khaikhan massif to the eastern end of Gobi-Altai Mountain Range; north to Turgen Mountain and Khan Höhii range; surrounding mountains in Valley of the Lakes, Southern Khangai Plateau, and east to Eastern Khangai (upper Urd Tamir River). It migrates through the breeding areas, dry open habitats with low bushes, mountain slopes with small bushes and rocky mountain slopes in Mongol-Altai Mountain Range, Baruunkhurai Depression; oases and mountains in Gobi (Trans-Altai, Alashani and W Eastern Gobi) (Kozlova, 1930; Mauersberger, 1980; Potapov, 1986; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Boldbaatar, 2002; Terbish & Gombobaatar, 2003).

Population: The global population consists of 100,000 - 1,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in summering and breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. Breeding pairs nest on the ground in open mountain areas of bare rocky slopes with sparse scrub. The nest is made of dried grass stems and lined with fine grass and horsehairs in dry, rocky mountain slopes and rockslides with sparse vegetation in high mountain ranges and desert steppes (Bold *et al.*, 2005; Gombobaatar, 2012). The female usually lays 5 eggs of glossy white, tinged very pale blue or buff, sparsely speckled with faint purplish-grey and with sparse spots or scrawls of black or purplish-black, concentrated towards the larger end. During hot days, they like to descend to

streams and creeks to drink and have a bath in high mountains. Duration of incubation and fledging are poorly known in Mongolia. On migration, they occur in pairs and small flocks consisting of 4-8 individuals and migrate through open habitats with shrubs and bushes and tall plants in Mongolia. They leave their breeding site for wintering grounds by late August-early September.

Habitat Type: 3. Shrub-land (in Rocky areas 3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas; 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species/.

Conservation Measures: Approximately 15.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

460. Scientific Name: *Emberiza hortulana*

Species Authority: Linnaeus, 1758

Common Names: Ortolan Bunting (English), Alag hömrög (Mongolian)

Subspecies in Mongolia: *E. h. elisabethae* (see Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Senegal; Western Sahara; Mauritania; Guinea; Morocco; Sierra Leone; Mali; Ireland; Portugal; Spain; Algeria; Cote d'Ivoire; United Kingdom; Gibraltar; France; Andorra; Belgium; Nigeria; Netherlands; Norway; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Chad; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Lithuania; Sudan; Ukraine; Bulgaria; Estonia; Belarus; Egypt;

Turkey; Moldova; Russian Federation; Uganda; Cyprus; Ethiopia; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Eritrea; Iraq; Georgia; Somalia; Djibouti; Yemen; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; Qatar; United Arab Emirates; Oman; Uzbekistan; China; Mongolia. It is considered vagrant in Iceland; Faroe Islands; Luxembourg; Cameroon; Kenya; Seychelles; Afghanistan; Tajikistan; Republic of Korea; Japan.

Regional Distribution: This species breeds from upper Khovd River through Bulgan River, east to ALag Lake and Southern Sharga Gobi, north to Kharkihraa and Turgen Mountains and Achit Lake (Mongol-Altai Mountain Range); Tes River (from upper to lower), lower Torkholig River and Northern Uvs Lake (Great Lakes Depression); from Khan Höhii across Northern Khangai (Tarvagatai and Bulnai Range); east to southern Hövsgöl Lake and upper Orkhon, Selenge Rivers (Orkhon-Selenge River basins). It migrates through the breeding areas, dry open country with short vegetation, dry scrubby areas low rocky hills and mountains and river valleys in Mongol-Altai Mountain Range, Southern Khangai Plateau, Orkhon-Selenge River basins, Middle Khalkh Steppe, Eastern Mongolian Plain and Gobi (N Eastern) (Tarasov, 1960; Mauersberger, 1980&1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Sumiya & Skryabin, 1989; Terbish & Gombobaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 20,000,000 - 100,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding and migrating individuals arrive in breeding and summering sites by late April-early May. Breeding begins in late May-early June. Breeding pairs nest on the ground and in bushes in open habitats with scrub and sparse trees and in forest clearings at the edge of high mountain forest, forest steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012). Female builds own nest in grass or under bush, on ground. The nest is a cup of dead grass and roots, lined with fine roots and hair. The female lays 4-6 eggs of glossy pale bluish, pinkish, purplish, or grey colour with dark grey, brown or greyish even spots, small blotches, or fine specks. The female incubates the eggs alone for 11-14 days. Both sexes care for and feed young on insects and their larvae, spiders and other terrestrial invertebrates for 10-15 days in the nest. On migration, they occur in pairs or small flocks consisting of 3-8 individuals joined with other buntings in Mongolia. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas (on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk prey on individuals on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes
Family: Emberizidae

461. Scientific Name: *Emberiza tristrami*

Species Authority: Swinhoe, 1870

Common Names: Tristram's Bunting (English), Samnaa hömrög (Mongolian)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; China; Mongolia; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: G.Leithaus (German bird watcher) found a single bird in Nömrög River valley of Dornod province in June-July, 1994 (Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2001). Joanne Kirk, an American birder, photographed a single bird at Menen military check point in Dornod province on 31 May, 2008 (J.Kirk pers. comm. and photographs).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. This species possibly passes through eastern Mongolia by late April-early May (on spring migration) and late August-early September (on autumn migration), depending on food availability and weather conditions. According to Byers *et al.* (1995), they feed on beetles, flies and other insects as well as seeds. They migrate through open areas of eastern Mongolia singly, or in small flocks.

Habitat Type: Potential habitats are 1. Forest (1.4. on migration); 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /oil and coal mining activities have directly and indirectly affected the species on migration/, 1.7. Fires /steppe fires may burn habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. The species migrates through some protected areas and Important Bird Areas in eastern Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

462. Scientific Name: *Emberiza fucata*

Species Authority: Pallas, 1776

Common Names: Chestnut-eared Bunting or Grey-hooded Bunting (English), Sharnuden hömrög or shar nuden hömrög (Mongolian)

Subspecies in Mongolia: *E. f. fucata* (see Byers *et al.* (1995) for further details)

Synonyms: *Spina fucata* (Pallas, 1776)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging, drought, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United Kingdom; Russian Federation; Kazakhstan; Pakistan; India; China; Nepal; Mongolia; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Democratic People's Republic of Korea; Republic of Korea; Japan. It is present, but of uncertain origin in Afghanistan.

Regional Distribution: This species breeds in Buren and Burged-Khangai Mountains, east to valleys of upper Onon and Herlen Rivers (Khangai and Hentii Mountain regions), Nömrög and Khalkh Rivers (Buir Lake-Khalkh River-Khyangan region). It migrates across the breeding areas, scrubby grassy areas, low bushes and high grasses on mountain slopes and river valleys in Gobi-Altai-, Khangai, Hövsgöl and Hentii Mountain Ranges, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region; oases and mountain valleys in Gobi (Trans-Altai, north of Northern, Alashani and SW Eastern Gobi (Kozlova, 1930; Bannikov&Skalon, 1948; Kleinstäuber&Succow, 1978; Mauersberger, 1980; Rogacheva *et al.*, 1988; Smirenskii *et al.*, 1991; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008). Lars Svensson from Sweden and field team members of the Mongolian Ornithological Society observed and photographed more than 10 breeding pairs in bushy and scrubby areas in a delta of the Khairgan River of Selenge basin (Gurtyn hötöl of E Khutag-Öndör sum in Bulgan province) on June, 2010 (L.Svensson pers. comm. and photographs)

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding birds arrive in their breeding and summering sites by late April-early May. Breeding season continues from May-July. They nest on scrubby hill-sides in open meadows and dry habitats with shrubby vegetation and river-side thickets in forest steppe and mountain forest (Bold *et al.*, 2005; Gombobaatar, 2012). The female builds own nest on the ground or low in a bush. The nest cup is constructed of dried grass, and moss, lined with roots and hair. Female lays 3-5 eggs of slightly glossy whitish, or pale grey bluish tinted colour with reddish-brown or dark brown speckles, lines, or markings. The female incubates the eggs alone for 11-13 days (Harris, 1975). Both sexes feed the young on grasshoppers, beetles, spiders, flies and their larvae. They feed on seeds of various plants in the non-breeding season. In late autumn and winter, they migrate through open habitats with bushes, scrub and scattered trees, and tall plants

in the steppe and forest steppe in small groups consisting of 5-10 individuals. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (edges of 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming / apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism / construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

463. Scientific Name: *Emberiza pusilla*

Species Authority: Pallas, 1776

Common Names: Little Bunting (English), Borlog hömrög (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by logging, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Iceland; Ireland; Portugal; Spain; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Slovenia; Poland; Malta; Hungary; Montenegro; Serbia; Greece; Finland; Latvia; Ukraine; Bulgaria; Estonia; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Islamic Republic of Iran; Kazakhstan; Republic of Korea; Kuwait; United Arab Emirates; Oman; Afghanistan; Pakistan; Tajikistan; India; China; Nepal; Mongolia; Bangladesh; Bhutan; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Hong Kong; Taiwan, Philippines; Democratic People's Republic of Korea; Japan.

Regional Distribution: In Mongolia, this species may breed in Minj River in mountain taiga (Hentii Mountain Range) and Hövsgöl range. However, there are some doubts for these breeding records. It migrates through almost all habitats in Khangai, Hövsgöl and Hentii Mountain Ranges, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Gobi-Altai Mountain Range, Baruunkhurai Depression and Gobi (Trans-Altai, Northern, Alashani and N Eastern Gobi) (Kozlova, 1930; Tugarinov, 1932; Grummit, 1961; Bold, 1973; Kleinstäuber&Succow, 1978; Mauersberger, 1982; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000 and 2005; Boldbaatar, 2002; 2005a; 2008; Mainjargal, 2005; Sumiya, 2006).

Population: The global population consists of 30,000,000 - 100,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and a passage migrant. Most migrating and breeding birds arrive in breeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are birch and willow scrub in tundra regions, or in swamps and clearings in taiga forest. The nest is placed on the ground among shrubs, small trees and tall herbage often hidden in plants or grass. The nest is a cup built into a small hollow, constructed of dead leaves and grasses; lined with hair and fine grass. The female usually lays 4-5 eggs of glossy pale purplish or grey, rarely buffish or greenish colour with black or dark purple, bold, often sparse blotches. The eggs are incubated chiefly by the female for 12-14 days. Both parents care for and feed the young on terrestrial insects and their larvae, spiders, beetles and grasshoppers for 10-13 days in the nest (Harris, 1975). On migration, they feed on seeds of various plants. It forms flocks consisting of 5-80 individuals and migrates across Mongolia by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including oil and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting (hunting or gathering) -3.5. Cultural, scientific, or leisure activities -3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed as souvenirs/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon (Gombobaatar 2006) and Eurasian Sparrowhawk prey on the species on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 6.9% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

464. Scientific Name: *Emberiza chrysophrys*

Species Authority: Pallas, 1776

Common Names: Yellow-browed Bunting (English), Sonduu hömrög (Mongolian)

Subspecies in Mongolia: *E. c. chrysophrys* (see Dawaa *et al.* (1994) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by fire, logging, drought, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United Kingdom; Netherlands; Ukraine; Russian Federation; China; Mongolia; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species possibly nests in mixed, low coniferous forest along the major rivers, Ulz and Khalkh River valleys. However, breeding records are doubtful. It migrates across the breeding areas, scrubby and weedy areas near forest with thickets in Herlen-Ulz River basins, Eastern Mongolian Plain, and Buir Lake-Khalkh River-Khyangan region (Tugarinov, 1932; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this species may breed and migrate through the eastern part of the country. Breeding records in the east are doubtful. However, the species arrives at breeding sites by late April-early May the same as other migratory birds. Breeding season continues from May-July. Breeding ecology is poorly known in Mongolia. Breeding habitats are mixed forest with a low coniferous trees and edges of coniferous forest along the major rivers and their tributaries. According to Byers *et al.* (1995), the nest is placed 1-2 m high, rarely near the ground. The nest is messy and loose, constructed of fine grasses and animal hair. The female lays 3-5 eggs of greyish- white or creamy grey colour with brown lines, dark streaks or curls. Both sexes incubate the eggs for 11-12 days. Both adults feed the young on flying insects and spiders. In winter, they feed on seeds. It is often found in mixed flocks with other buntings during the migration.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and possible breeding sites/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides and drought/; 10. Human

disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 9.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

465. Scientific Name: *Emberiza rustica*

Species Authority: Pallas, 1776

Common Names: Rustic Bunting (English), Kharshanaat hömrög or tsagaan hömsög hömrög (Mongolian)

Subspecies in Mongolia: *E. r. rustica* (see Howard & Moore (1994); Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Iceland; Portugal; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Sweden; Slovenia; Poland; Malta; Croatia; Montenegro; Serbia; Greece; Finland; Latvia; Bulgaria; Estonia; Egypt; Turkey; Russian Federation; Israel; Jordan; Lebanon; Syrian Arab Republic; Iraq; Islamic Republic of Iran; Kazakhstan; Kuwait; United Arab Emirates; Oman; Afghanistan; China; Nepal; Mongolia; Hong Kong; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species is found in Hövsgöl Mountain Range; Tuul, Terelj, and Herlen Rivers (Hentii Mountain Range); Eastern Mongolian Plain and Buir Lake-Khalkh River-Khyangan region; oases and bushy mountain slopes in Gobi (Trans-Altai, Alashani and SW Eastern Gobi) (Kozlova, 1930; Tugarinov, 1932; Gagina, 1960; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2005a; Sumiya, 2006).

Population: The global population consists of 40,000,000 - 120,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a passage migrant in Mongolia. This species migrates across coniferous and mixed forest edges, in thickets and birch groves along river banks and swamps, and open river valleys with young short willow trees and tall dense bushes (Bold *et al.*, 2005; Gombobaatar, 2012) by late April-early May and by late August-early September, depending on food availability and weather conditions. Its natural food consists of insects when feeding young and otherwise seeds (Byers *et al.*, 1995). Habitat Type: 1. Forest (1.4. on migration); 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (at edges, on shore, banks near 5.1.-5.8., 5.13.-5.17. only on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /

overgrazing of livestock near non-breeding sites of the species is a cause of habitat degradation associated with drought/; 1.3. Extraction- 1.3.1. Mining /gold and other mining activities have directly and indirectly affected the species on migration/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding sites/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 12.8% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

466. Scientific Name: *Emberiza elegans*

Species Authority: Temminck, 1835

Common Names: Yellow-throated Bunting (English), Tavt hömrög (Mongolian)

Subspecies in Mongolia: *E. e. ticehursti*, *E. e. elegans* (see Howard & Moore (1994); Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; China; Mongolia; Myanmar; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: W.D. Busching (Naumann Museum, Germany) and P.Tsengeg found 6 individuals in a garden at Choibalsan town on 28 September of 1994 (Dawaa *et al.*, 1994).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. It has been recorded only once in the east. Individuals were observed feeding on the ground among planted poplar trees. They may migrate through eastern Mongolia by late April-early May (on spring migration) and late August-late September (on autumn migration). They prefer open habitats and feed on seeds of various plants on the ground during their migration. This species migrates in small flocks.

Habitat Type: Potential habitats are 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys*

brandti) and insecticides are causes of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding sites/; 8. Changes in native species dynamics- 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. However, the species migrates through some protected areas and Important Bird Areas in the east of the country.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

467. Scientific Name: *Emberiza aureola*

Species Authority: Pallas, 1773

Common Names: Yellow-breasted Bunting (English), Sharelegt hömrög or shar elegt hömrög (Mongolian)

Subspecies in Mongolia: *E. a. aureola*, *E. a. ornata* (see Byers *et al.* (1995) for further details)

Synonyms: *Emberiza sibirica*; *Euspiza aureola*; *Hypocentor aureola* (Pallas, 1776)

Global Status: Vulnerable A2acd+3cd+4acd

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. This species is likely to be upgraded to a threat category in the near future. The number of breeding pairs in certain areas of Mongolia has been decreasing over the last four years due to drought and overgrazing. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Ireland; Portugal; Spain; United Kingdom; France; Belgium; Netherlands; Norway; Germany; Italy; Denmark; Sweden; Czech Republic; Poland; Malta; Greece; Finland; Latvia; Estonia; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Islamic Republic of Iran; Kazakhstan; Bahrain; United Arab Emirates; Oman; Pakistan; India; China; Nepal; Mongolia; Bangladesh; Myanmar; Thailand; Malaysia; Lao People's Democratic Republic; Viet Nam; Cambodia; Singapore; Brunei Darussalam; Hong Kong; Taiwan, Philippines; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in Achit Lake valley, valleys of Kharkhiraa and Turgen Mountains, Khovd River (Mongol-Altai Mountain Range); Northern Uvs Depression, Khar-Us, Khar, Dörgön Lakes and Zereg Depression (Great Lakes Depression); from Khan Höhii Mountain, east to northern Khangai Mountain (up to 2,200 m asl) (Khangai Mountain Range); Hövsgöl Mountain Range; Orkhon-Selenge River basins; Hentii Mountain Range (except for dense taiga forest); Herlen-Ulz River basins; some lakes and rivers in Middle Khalkh Steppe and Mongol Daguur Steppe; Khalkh, Degee, Nömrög Rivers and Tashgain Tavan Lake (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, and Orog Lakes (Valley of the Lakes); Bulgan River (Baruunkhurai Depression); Shar Khuls, Tsagaan Burgas, Zakhui oases and Alag Lake (Trans-Altai Gobi). It migrates across the breeding areas, river valleys and open habitats with bushes in Gobi-Altai-, Khangai, Hövsgöl and Hentii Mountain Ranges, Eastern

Mongolian Plain, Alashani and Eastern Gobi (Tugarinov, 1916; Kozlova, 1930; Bannikov&Skalon, 1948; Kleinstäuber&Succow, 1978; Mauersberger, 1980; Piechocki *et al.*, 1982; Potapov, 1986; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Terbish & Gombobaatar, 2003; Bold, 2005; Tseveenmyadag & Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008; Nyambayar &Tseveenmyadag, 2009).

Population: The global population consists of 120,000 - 1,000,000 mature individuals. Global breeding and resident ranges are estimated at 15,700,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most individuals arrive in breeding sites by late April-early May. Breeding begins in late May-early June. Breeding pairs nest in scattered willow or birch scrub in wet meadows, shrubby areas and thickets on river banks and near streams, sparse growth of young forest, the edge of birch forest and forest clearings in mountain taiga forest, forest steppe and lake and river valleys (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). This species was one of the most common breeders in shrubs, young deciduous forested areas, and patchy deciduous trees with dense bushes all over Mongolia. Over the last 11 years, the number of occurrences and number of breeding pairs in the areas where it was common have rapidly declined, due to a global decline caused by legal and illegal harvesting at the wintering grounds in China. Nest is usually situated in a low bush or among tall coarse herbage. The nest is a cup built of dried grass lined with finer grass and hair. Breeding pairs lay 4-5, rarely 6 eggs of glossy greenish or greyish, ground colour with purplish-black or brown, rarely pale greenish-blue sparse spots, small blotches, or faint grey blotches. The eggs are incubated at daily intervals by the female alone beginning with completion of clutch for 13 days. Both parents care for and feed the chicks on terrestrial insects (grasshoppers, beetles) and their larvae, and spiders. The young leave the nest at 13-15 days. On migration, they eat seeds of various plants. It forms flocks consisting of 4-10 individuals and migrates through habitats with bushes, scrub, tall plants and planted trees and edges of springs and creeks in the steppe. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (bushes and deciduous forest near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic: In summer and spring, livestock gather near open water points (creeks, spring and small rivers) with dense bushes and young deciduous trees to drink. They graze plants in these bushes and trees after drinking and destroy the nests containing eggs and chicks. This has been happening all over Mongolia. In June, 2004, we found 3 breeding pairs in such a place at Örtöö Mukhar of field station of the National University of Mongolia. In June 2008-2010, only one singing male was observed.

1.3. Extraction- 1.3.1. Mining: Gold mining activities are located always near water resources in order to wash the soil with gold pieces in N, NW and NE Mongolia. These areas overlap with breeding habitats of the species.

1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting: Cutting of trees at forest edges and bushes with nests is a potential threat to breeding species. In most cases this species disappears from the sites.

1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation: Recent tourist camps, lodges and constructions for mining are located close to natural landscapes such as river valleys, open water areas and forested areas. These areas are also potential and native breeding habitats of the species. Breeding pairs usually leave the areas during and after construction.

1.7. Fires: Spring forest and steppe fires may burn breeding habitats all over Mongolia, particularly eastern Mongolia. The fires may burn nests with eggs and young.

4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./.

4.1.2.3. Poisoning: Chemicals, such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides in forest are potential causes of individual poisoning on

migration and at breeding sites. However, this evidence has not documented yet in Mongolia.

5. Persecution- 5.1. Pest control /see 4.1.2.3./.

6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming: Apparently due to global warming and drought, their breeding habitats have been dramatically changing in Mongolia. A drought of permafrost, wetlands and bushes is critical to breeding pairs and non-breeders as well.

6.3.10. Noise pollution: Noise from industrial activities /see 1.3.1./ tourisms /1.4.1.-1.4.3./ transport and local herders affect both breeding and non-breeding species.

7. Natural disasters- 7.1. Drought: Due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites. Some of these areas in eastern Mongolia, Mongolia Daguur and Ulz River valleys, completely dried out. See also 6.1.1.

7.3. Temperature extremes: Overcooling of eggs and chicks in the early breeding season is one of the threats to the species.

8. Changes in native species dynamics- 8.2. Predators: Most abundant avian predators such as Saker Falcon, Eurasian Hobby and Eurasian Sparrowhawk prey on the species on migration. Eurasian Badger (*Meles meles*) and Raccoon Dog (*Nyctereutes procynoides*) eat eggs and young chicks in Ulz, Onon, Balj, Khalkh and Nömrög River valleys.

8.3. Prey or food base: A decrease in density of prey species caused by habitat loss, use of insecticides, and drought is a potential threat to the species.

10. Human disturbance- 10.1. Recreation and tourism: Construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species. See also 1.4.1-1.4.3.

10.4. Transport: Transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species

10.5. Fire: See 1.7.

Conservation Measures: Approximately 9.4% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

468. Scientific Name: *Emberiza rutila*

Species Authority: Pallas, 1776

Common Names: Chestnut Bunting (English), Orhimjit hömrög (Mongolian)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by logging, fire, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; Pakistan; India; China; Nepal; Mongolia; Myanmar; Thailand; Lao People's Democratic Republic; Viet Nam; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at Eg and Uur Rivers, north to the country border, Selenge River (lower Eg River), Buteel and Khantai Mountains (Teshig sum) and Hövsgöl Mountain Range, including Darkhad Depression. It migrates through the breeding territories, forested areas, river valleys with young deciduous trees and bushes in Hövsgöl Mountains, Tuul River, Bogd Khaan Mountain (Ulaanbaatar city area), Onon, Balj, and Herlen Rivers (Hentii Mountain Range); Khalkh, Degee, Nömrög, Tsagaan Chuluut and Azarga Rivers, and Buir, Tashgain Tavan Lakes (Buir Lake-Khalkh River-Khyangan region) (Bold, 1969; Sergelen, 1986; Erdenebat, 1989; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Boldbaatar, 2002; Boldbaatar, 2003; Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most of the breeding individuals and passage birds arrive in breeding and non-breeding sites by late April-early May. Breeding begins in late May-early June. Breeding habitats of the species in Mongolia are coniferous, deciduous and mixed forests with shrubby ground cover on mountain taiga slopes, forest steppe and river valleys in taiga forest. Breeding ecology has been poorly studied in Mongolia. According to Byers *et al.* (1995), the nest is placed in dense bushes, small trees or creepers, usually 1-2 m above ground. It is a bulky cup made of grasses, rootlets, stems, dried leaves, and twigs, lined with finer grasses. The female lays 2-3 eggs of whitish or pale green or cream colour with sepia, grey blotches and scrawls. Incubation and care of young are similar to other buntings (Harris, 1975). The food consists of insects (grasshoppers, beetles) in breeding and seeds of various plants on migration. It is often seen in pairs. On migration, 4-14 birds gather in flocks and migrate through areas with trees, bushes, reeds, and tall plants in eastern Mongolia. They leave the breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial- 4.1.2.3. Poisoning /chemicals like insecticides are a cause of individual poisoning/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 10.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

469. Scientific Name: *Emberiza melanocephala*

Species Authority: Scopoli, 1769

Common Names: Black-headed Bunting (English), Kharolgoit hömrög or kharolgoi hömrög (Mongolian)

Synonyms: *Emberiza icteria*, *Euspiza melanocephala* (Scopoli, 1769)

Global Status: Least Concern

Regional Status: Not Applicable

Rationale for Assessment: This species has been assessed as Not Applicable as its total distribution covers less than 1% of Mongolia, therefore this species is classified as vagrant.

History: 2009-Not Applicable

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Iceland; Morocco; Ireland; Spain; Algeria; United Kingdom; Faroe Islands; France; Netherlands; Norway; Germany; Switzerland; Italy; Tunisia; Denmark; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia; Ukraine; Bulgaria; Egypt; Turkey; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; United Arab Emirates; Oman; Afghanistan; China; Nepal; Mongolia; Thailand; Malaysia; Lao People's Democratic Republic; Brunei Darussalam; Hong Kong; Republic of Korea; Japan; Palau.

Regional Distribution: This species was found at Nömrög River of Dornod province in June, 1994 (Bold & Tseveenmyadag, 2002).

Population: The global population consists of 10,000,000 - 50,000,000 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: In Mongolia, this is a vagrant. The species migrates along open scrubby and forested areas of Nömrög River valley during spring migration and possibly autumn migration. Its natural food consists of insects when feeding young and otherwise seeds (Byers *et al.*, 1995).

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic, 1.3. Extraction- 1.3.1. Mining, 1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism/ 1.7. Fires; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.3. Poisoning; 5. Persecution- 5.1. Pest control; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming; 7. Natural disasters- 7.1. Drought; 8. Changes in native species dynamics- 8.2. Predators, 8.3. Prey or food base; 10. Human disturbance- 10.1. Recreation and tourism, 10.4. Transport, 10.5. Fire /see 1.7./.

Conservation Measures: Specific conservation measures have not been implemented for this species in Mongolia. But this species possibly migrates through some protected areas and Important Bird Areas in eastern Mongolia.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

470. Scientific Name: *Emberiza bruniceps*

Species Authority: Brandt, 1841

Common Names: Red-headed Bunting (English), Hurentolgoit hömrög or shar hömrög (Mongolian)

Synonyms: *Emberiza/Euspiza luteola* (Brandt, 1841)

Global Status: Least Concern

Regional Status: Data Deficient

Rationale for Assessment: This species has been assessed as Data Deficient. It has a small area of occupancy of less than 20,000 km². The population size is unknown; therefore, until further population information is gained, it is not possible to make an accurate regional assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Data Deficient

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Spain; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Sweden; Czech Republic; Turkey; Russian Federation; Israel; Saudi Arabia; Iraq; Islamic Republic of Iran; Kazakhstan; Kuwait; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Pakistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Bangladesh.

Regional Distribution: This species nests and migrates in dry open steppe in hills with thickets and scrubby areas in Bulgan and Uyenchi River valleys (Baruunkhurai Depression or Dzungariin Gobi) (Bold, 1965; Piechocki *et al.*, 1982; Fomin & Bold, 1991; Dawaa *et al.*, 1994).

Population: The global population size has not been quantified. In Europe, the breeding population is estimated to number 250-1,000 breeding pairs, equating to 750-3,000 individuals (BirdLife International, 2004). There is no population estimate for Mongolia.

Regional Population Trend: Unknown.

Habitats & Ecology: This is a breeding visitor to Mongolia. The species arrives at breeding sites by late April-early May the same as other migrating buntings. Breeding season continues from May-July. Breeding ecology is almost unknown in Mongolia. According to Byers *et al.* (1995), the nest is built by the female alone, and is a cup of grasses, lined with dried softer grasses and roots. The nest is placed in bushes, tall thick plants usually 10-50 cm above the ground. The female lays 4-5 eggs of glossy pale bluish or greenish-white colour with grey speckles and streaks. The female incubates the eggs alone for 12-13 days. Young fledge after about 12-13 days (Harris, 1975). They are reared by the female alone, and are fed with invertebrates such as grasshoppers, caterpillars and beetles. Diet of adults is mainly seeds of grasses, insects and their larvae as well. On migration, they form large flocks. They leave their breeding sites for wintering grounds possibly by late August-early September.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging /cutting of trees and bushes with nests is a potential threat to the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 8.3. Prey or food

base /a decrease in density of prey species caused by habitat loss, and drought/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 5.5% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

471. Scientific Name: *Emberiza spodocephala*

Species Authority: Pallas, 1776

Common Names: Black-faced Bunting (English), Höhturuut hömrög or höh turuut hömrög (Mongolian)

Subspecies in Mongolia: *E. s. spodocephala* (see Byers *et al.* (1995) for further details)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by logging, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United Kingdom; Netherlands; Germany; Finland; Russian Federation; Kazakhstan; India; China; Nepal; Mongolia; Bhutan; Myanmar; Indonesia; Thailand; Lao People's Democratic Republic; Viet Nam; Hong Kong; Taiwan, Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at Eg and Uur Rivers, Orkhon and Selenge Rivers, Buteel and Khantai Mountains, up to Teshig sum, north to along country border; Minj, Tuul, Terelj, Onon, Balj, Huder, Bulnai, and upper Herlen Rivers (Hentii Mountain Range); Khalkh, Degee, Nömrög Rivers and Ih Khyangan Mountain (Buir Lake-Khalkh River-Khyangan region). It migrates through the breeding areas, forested areas, river valleys and dry open habitats with bushes in the Great Lakes Depression (Sh. Boldbaatar pers. comm.), Northern Uvs Depression, Khangai Mountain Range including Southern Khangai Plateau, Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Gobi-Altai Mountain Range and Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Molleson, 1906; Kozlova, 1930; Gagina, 1960; Fischer, 1970; Kleinstäuber&Succow, 1978; Mauersberger, 1980&1982; Stephan, 1988; Fomin & Bold, 1991; Smirenskii *et al.*, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a breeding visitor and passage migrant. Breeding and non-breeding individuals arrive in breeding sites by late April-early May. Breeding begins in late May-early June. Breeding habitats are young deciduous trees, dense tall bushes and thickets in river valleys, at forest edges, meadows and hills with sparse birches in mountain taiga forest, forest steppe and mountain valleys, rivers and lakes (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is

placed on the ground or low in a bush. It is built of soft dry grasses, lined with softer grass and hair. Female lays 4-5 eggs of pale greenish or bluish white to pinkish white colour with reddish-brown, purplish brown or dark patches, spots and blotches. Duration of incubation and fledging is probably 20-25 days. Both sexes care for and feed the young on terrestrial insects (beetles, bugs, ants, flies) and their larvae and spiders. On migration, they eat seeds of various plants in Mongolia. They form flocks consisting of 4-30 birds, mostly young, and migrate through open areas, clearings of deciduous forest, tall bushy areas, open steppe habitats, and lake and river valleys by late August-early September, depending on food availability and weather conditions.

Habitat Type: 1. Forest (1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (edges, shore, banks and near 5.1.-5.8., 5.13.-5.17. only on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including oil and coal mining have directly and indirectly affected the species/-1.3.3. Wood -1.3.3.1. Small scale subsistence- 1.3.3.2. Selective logging - 1.3.3.3. Clear-cutting /cutting of trees and bushes with nests is a potential threat to the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk on migration/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 7.7% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

472. Scientific Name: *Emberiza pallasi*

Species Authority: (Cabanis, 1851)

Common Names: Pallas's Bunting or Pallas's Reed Bunting (English), Tsagaanhevelt hömrög or tsagaan hevelt hömrög (Mongolian)

Subspecies in Mongolia: *E. p. pallasi*, *E. p. lydiae* (see Byers *et al.* (1995) for further details)

Synonyms: *Cynchramus pallasi* (Cabanis, 1851)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by livestock, steppe fire, drought and mining, it has been assessed as Least Concern owing to its common occurrence and wide distribution in Mongolia. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Portugal; United Kingdom; Denmark; Sweden; Russian Federation; Kazakhstan; China; Nepal; Mongolia; Myanmar; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in upper Khovd River (Mongol-Altai Mountain Range); Northern Uvs and Great Lakes Depression; across the main Khangai range (up to 2,500 m asl), Tarvagatai and Bulnai Mountains, east to upper Orkhon River, south to Southern Khangai Plateau (Khangai Mountain Range); Hövsgöl and Hentii ranges; Middle Khalkh Steppe and Mongol Daguur Steppe; Eastern Mongolian Plain; Khalkh, Degee, Nömrög Rivers and Buir, Tashgain Tavan Lake and Ih Khyangan Mountains (Buir Lake-Khalkh River-Khyangan region); Bööntsagaan, Ulaan, Orog, and Taatsyn Tsagaan Lakes (Valley of the Lakes) and Northern Gobi. It migrates through open habitats with bushes and tall grasses in mountain steppe and river valleys in the breeding areas, and oases and mountains (Gombobaatar, 2012) in Trans-Altai, Northern, Alashani and Eastern Gobi (Molleson, 1906; Berezovskii, 1881; Tugarinov, 1916; Kozlova, 1930; Kozlova, 1932; Tugarinov, 1932; Gagina, 1960; Fischer, 1970; Kleinstäuber&Succow, 1978; Mauersberger, 1980; Piechocki *et al.*, 1982; Rogacheva *et al.*, 1988; Stephan, 1988; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Smirenskii *et al.*, 1991; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Bold, 2005; Boldbaatar, 2003; Boldbaatar, 2005a; Tseveenmyadag & Bold, 2005; Mainjargal, 2005; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population is unknown (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most breeding and non-breeding individuals arrive in breeding sites by late April-early May, depending on weather conditions. Breeding season continues from May-July. This species nests on the ground, or at base of tall reeds, grasses *Achnatherum splendens*, low bushes such *Caragana* spp. bushes in dry open habitats in steppe, reeds and overgrown thickets along river banks and lakes, dry mountain valleys with tall grasses and mountain slopes with tall cover in forest steppe, mountain steppe, desert steppe, mountain valleys, rivers and lakes (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest cup is constructed of grass, moss, and is lined with finer grasses and hair. The female usually lays 4-5 eggs of glossy pale purplish, grayish buff colour with dark or dark -purple scrawls and blotches. The female incubates the eggs for 11-13 days. Both sexes care for and feed the young on terrestrial and aquatic arthropods, dominantly insects. The males like to perch and sing on the top of bushes and tall grasses. In the non-breeding season, it is a seed-eater. They occur in open reed beds, and tall sedges in lake and river valleys, and tall plants and shrubs in open dry steppe on migration. They form flocks consisting of 6-20 individuals and migrate through open habitats along rivers and lake valleys, steppe and desert steppe. They leave their breeding site for wintering grounds by late August-early September, depending on weather conditions.

Habitat Type: 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. with bushes); 5. Wetlands (reed beds and edges of tall plants near 5.1.-5.8., 5.13.-5.17. in breeding and on migration); 6. Rocky areas (on migration); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (near 11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock near non-breeding and breeding sites of the species is a cause of habitat degradation associated with drought/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human

settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires /forest and steppe fires may burn breeding habitats/; 3. Harvesting (hunting or gathering) -3.5. Cultural, scientific, or leisure activities -3.5.1. Subsistence use or local trade /several bird species, including this species, are collected and stuffed as souvenirs/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) and insecticides are causes of individual poisoning/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat degradation and disturbance/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, and Eurasian Sparrowhawk on migration, Grey Wolf (*Canis lupus*) and Red Fox (*Vulpes vulpes*) prey on their eggs and chicks/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/, 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.6% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

473. Scientific Name: *Emberiza schoeniclus*

Species Authority: (Linnaeus, 1758)

Common Names: Reed Bunting or Common Reed Bunting (English), Tsagaanhuuut hömrög or tsagaan huuut hömrög (Mongolian)

Subspecies in Mongolia: *E. s. harterti*, *E. s. pyrrhuloides*, *E. s. pallidior*, *E. s. parvirostris* (see Howard & Moore (1994); Byers *et al.* (1995) for further details)

Synonyms: *Fringilla schoeniclus* (Linnaeus, 1758)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by reed and grass cutting, drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: United States; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; Gibraltar; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Tunisia; Denmark; Liechtenstein; Libyan Arab Jamahiriya; Austria; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Albania; Greece; Romania; the Former Yugoslav Republic of Macedonia; Finland; Latvia;

Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Egypt; Turkey; Moldova; Russian Federation; Cyprus; Israel; Saudi Arabia; Jordan; Lebanon; Syrian Arab Republic; Iraq; Georgia; Armenia; Islamic Republic of Iran; Azerbaijan; Kazakhstan; Kuwait; Bahrain; United Arab Emirates; Oman; Turkmenistan; Uzbekistan; Afghanistan; Tajikistan; India; Kyrgyzstan; China; Nepal; Mongolia; Hong Kong; Taiwan; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds at Aчит Lake (Mongol-Altai Mountain Range); northern Uvs, Khar-Uс, Khar, Döргön, northern Khyargas, Baga Lakes and lower Torkholig, Tes (delta), Zavkhan (Jargalant sum) Rivers and Borogdel Els, Zereg Depression (Great Lakes Depression); Khangai Mountain Range across Hentii Mountain to valleys of Tuul River further through Onon, Balj and Ulz Rivers (Hentii Mountain Range and Mongol Daguur Steppe), Bulgan River (Baruunkhurai Depression) and Khalkh River delta and Tashgain Tavan Lake. It migrates across the breeding areas, reed beds, forest edges, young deciduous trees along river valleys and steppe mountain slopes with bushes in Southern Khangai Plateau, Orkhon-Selenge River basins, Hentii Mountain Range, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes and Gobi (Trans-Altai, southern North, Alashani and SW Eastern Gobi) (Berezovskii, 1881; Mollesson, 1906; Kozlova, 1930; Tugarinov, 1932; Piechocki *et al.*, 1982; Potapov, 1986; Fomin & Bold, 1991; Smirenskii *et al.*, 1991; Stubbe *et al.*, 1993; Dawaa *et al.*, 1994; Tseveenmyadag *et al.*, 2000; Terbish & Gombobaatar, 2003; Boldbaatar, 2003 Boldbaatar, 2005a; Mainjargal, 2005; Tseveenmyadag & Bold, 2005; Tseveenmyadag *et al.*, 2005; Boldbaatar, 2008).

Population: The global population consists of 30,000,000 - 100,000,000 mature individuals. Global breeding and resident ranges are estimated at 23,800,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: This is a breeding visitor to Mongolia. Most migrating and breeding individuals arrive in summering and breeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are rank vegetation, reed beds, and waterside scrub near water in lake and river valleys. Their typical habitats are fresh or saline open marshland with grassy banks or scattered shrubs. Female builds the nest on the ground, often in grass or rush clumps, or in low bushes and scrub (Bold *et al.*, 2005; Tseveenmyadag *et al.*, 2010; Gombobaatar, 2012). The nest is a cup made of grass, roots, and moss and lined with finer grasses, hair and reed-flowers. The female usually lays 4-5, occasionally 6-7 eggs of glossy pale purplish, grey, rarely buffish or greenish colour with black or blackish-purple bold, sparse scrawls and blotches. The female incubates the eggs for 12-14 days. Both sexes care for and feed the young on terrestrial and aquatic arthropods, dominantly insects for 10-13 days in the nest. In the non-breeding season, they eat seeds of various plants in open reed beds, and tall sedges in lake and river valleys, and tall plants and shrubs in open dry steppe on migration. They form flocks consisting of 6-20 individuals and migrate through open habitats along rivers and lake valleys. They leave their breeding site for wintering grounds by late August-early September, depending on food availability and weather conditions.

Habitat Type: 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4. on migration); 5. Wetlands (reed beds and tall sedge plants near 5.1.-5.8., 5.13.-5.17. in breeding and migrating); 8. Desert (8.2. only on migration); 11. Artificial – Terrestrial (11.3., 11.4. only on migration).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic /overgrazing of livestock in reed beds of marshes, ponds, lakes and rivers is a cause of the habitat loss and degradation/, 1.3. Extraction- 1.3.1. Mining /gold and other mining activities including coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/, 1.7. Fires / steppe fires may burn breeding habitats;/ 4. Accidental mortality- 4.2. Collision-4.2.1. Pylon and building collision /potential threat to this species;/ 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their habitats have been critically changing/, 6.2. Land pollution- 6.2.2. Domestic /domestic land pollution caused by mining and industrial activities is a cause of habitat

degradation and disturbance/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/, 7.3. Temperature extremes /overcooling of eggs and chicks in the early breeding season/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon, Eurasian Hobby, Eurasian Sparrowhawk on migration, and Eurasian Badger (*Meles meles*) and Raccoon Dog (*Nyctereutes procynoides*) prey on eggs and chicks of the species/, 8.3. Prey or food base /a decrease in density of prey species caused by habitat loss, use of insecticides, and drought/; 10. Human disturbance-10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 8.0% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

474. Scientific Name: *Emberiza yessoensis*

Species Authority: (Swinhoe, 1863)

Common Names: Ochre-rumped Bunting, or Japanese Reed Bunting (English), Naran hömrög (Mongolian)

Subspecies in Mongolia: *E. y. continentalis* (see Byers *et al.* (1995) for further details)

Synonyms: *Emberiza minor*, *Schoenicola yessoensis*, *Cynchramus yessoensis*

Global Status: Near Threatened

Regional Status: Near Threatened

Rationale for Assessment: This species has been assessed as Near Threatened because of the small extent of its occurrence and ongoing habitat loss and degradation. The number of breeding pairs in certain areas of Mongolia has been decreasing over the last years due to drought and overgrazing. This species is likely to be upgraded to a threat category in the near future. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Near Threatened

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Russian Federation; China; Hong Kong; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species breeds in valleys of Khalkh River (possibly nests) and Tashgain Tavan Lake (Badley *et al.*, 2005). On 31 May, 1998, 6 birds were collected at Tashgain Tavan Lake (at 47°22'N; 118°29'E). It most likely breeds at Tashgain Tavan Lake, Guu and Azarga Rivers of Dornod province (Boldbaatar, 2005). On 24 July, 2009, S.Gombobaatar, P.Amartuvshin, Ch.Uuganbayar, B.Odkhuu, Bernd Nicolai and his team (Museum Heineanum, Halberstadt in Germany) found and photographed a singing male and a female carrying food in her beak and feeding young in a marshy area east of Tashgain Tavan Lake (at 47.33884°N; 118.48979°N) of Dornod province (S.Gombobaatar pers. comm. and photographs).

Population: The global population consists of 10,000-19,999 mature individuals (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Decreasing.

Habitats & Ecology: This is a breeding visitor to Mongolia. Breeding individuals arrive in breeding sites by late April-early May. Breeding season continues from May-July. Breeding habitats are marshland and

wetland fringes with reeds, bushes and tall sedge grasses, low reed, and waterside scrub near water in lake and river valleys. The nest is situated on or very close to the ground in Mongolia. The nest is built of grass and moss, and lined with finer grasses and hairs. According to Byers *et al.* (1995), the female lays 3-5 eggs of ochre-whitish colour with brown patches and black lines. The young leave the nest at 11-12 days. Both parents care for and feed young on beetles and caterpillars, and seeds. In winter, plant seeds constitute a major part of the diet. Migration pattern is poorly known in Mongolia. The same as other migrating buntings, they leave their breeding site for wintering grounds by late August-early September. Habitat Type: 3. Shrub-land (3.3., 3.4. on migration); 4. Grassland (4.4. on migration); 5. Wetlands (5.3., 5.4.).

Dominant Threats: Potential dominant threats follow;

1. Habitat Loss and Degradation (human-induced)-1.1. Agriculture- 1.1.4. Livestock- 1.1.4.1. Nomadic / overgrazing of livestock is the critical degradation and loss of breeding habitats in marshy areas in the east/, 1.7. Fires / steppe fires may burn their breeding habitats and nests with eggs and occasionally young/; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming / apparently due to global warming, their habitats have been critically changing/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 7. Natural disasters- 7.1. Drought /due to the drought of the last few years, degradation and loss of habitats have been intensively occurring in non-breeding and breeding sites/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Eurasian Sparrowhawk on migration, and Eurasian Badger (*Meles meles*) and Red Fox (*Vulpes vulpes*) prey on the species in breeding areas/; 9. Intrinsic factors- 9.5. Low densities -9.9. Restricted range /these factors always negatively affect the population number of this species/; 10. Human disturbance- 10.4. Transport /transport by car and local herders (busy roads) near non-breeding and breeding sites of the species have been negatively affecting the species, 10.5. Fire /see 1.7./.

Conservation Measures: Approximately 18.1% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

475. Scientific Name: *Calcarius lapponicus*

Species Authority: (Linnaeus, 1758)

Common Names: Lapland Longspur or Lapland Bunting (English), Lapland buulgathömrög or buulгат hömrög (Mongolian)

Subspecies in Mongolia: *C. l. lapponicus* (see Byers *et al.* (1995) for further details)

Synonyms: *Fringilla calcarata* (Linnaeus 1758); *Plectrophanes lapponicus* (Linnaeus 1758); *Fringilla japonica* (Linnaeus 1758,)

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Mexico; Saint Pierre and Miquelon; Bermuda; Greenland;

Iceland; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Germany; Switzerland; Italy; Denmark; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Romania; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Belarus; Turkey; Russian Federation; Kazakhstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species winters and migrates across dry open habitats and mountain slopes in high mountains, at the edge of mountain forest, forest steppe, mountain steppe, desert steppe and river valleys (Bold *et al.*, 2005; Gombobaatar, 2012) in Mongol-Altai and Gobi-Altai Mountain Range, Great Lakes Depression, Khangai, Hövsgöl and Hentii Mountain Ranges (except for dense forest in taiga), Orkhon-Selenge River basins, Middle Khalkh Steppe and Mongol Daguur Steppe, Eastern Mongolian Plain, Buir Lake-Khalkh River-Khyangan region, Valley of the Lakes, Baruunkhurai Depression and Gobi (Trans-Altai, Northern, Alashani and Eastern Gobi) (Berezovskii, 1881; Kozlova, 1930; Tugarinov, 1932; Tarasov, 1960; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Tsevenmyadag *et al.*, 2000; Boldbaatar, 2003; Terbish & Gombobaatar, 2003; Tsevenmyadag & Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Mainjargal, 2005; Tsevenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 150,000,000 mature individuals. Global breeding and resident ranges are estimated at 8,300,000 km² (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a winter visitor. The species arrives in wintering sites by mid-October-early November, depending on snow cover and seeds. This time of the year, birds migrating to the south pass through open steppe of the country. They feed on seeds of various plants. Thus, most wintering and migrating individuals in the country gather in areas where seeds are abundant in open forest steppe, mountain steppe, northern desert steppe, mountain regions and cultivated fields in Mongolia. They are gregarious seed-eaters. They form flocks consisting of 20-2,000 individuals and move around the areas with thin snow and abundant seeds in the country. They join with flocks of Snow Bunting in winter. They leave the country by early March-late April, depending on weather conditions.

Habitat Type: 1. Forest (edge of 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4.); 5. Wetlands (valleys of 5.1.-5.8., 5.13.-5.17.); 6. Rocky areas (on passage); 8. Desert (8.2. on passage); 11. Artificial – Terrestrial (11.3., 11.4. only on passage).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining / gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) remaining under snow/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their wintering habitats have been critically changing/- 6.3.10. Noise pollution /noise from industry, transport and local herders/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Merlin prey on the species/, 8.3. Prey or food base /a decrease of seeds caused by habitat loss, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/.

Conservation Measures: Approximately 8.3% of the species' range in Mongolia occurs within protected areas.

Kingdom: ANIMALIA, **Phylum:** CHORDATA, **Class:** AVES, **Order:** Passeriformes

Family: Emberizidae

476. Scientific Name: *Plectrophenax nivalis*

Species Authority: (Linnaeus, 1758)

Common Names: Snow Bunting (English), Tuilyn tsaschhömrög or tsasch hömrög (Mongolian)

Subspecies in Mongolia: *P. n. vlasowae*, *P. n. nivalis* (see Byers *et al.* (1995) for further details)

Synonyms: *Emberiza montana* (Linnaeus 1758); *Emberiza subnivalis* (Linnaeus 1758); *Plectrophenax borealis* (Linnaeus 1758); *Emeiza nivalis* (Linnaeus 1758).

Global Status: Least Concern

Regional Status: Least Concern

Rationale for Assessment: Although this species is subject to habitat loss and degradation by drought, mining, overgrazing by livestock and human disturbance, it has been assessed as Least Concern because the current threats to this species are not great enough to warrant a threat category assessment. Further research is needed into population size and trends, biology and ecology, habitat status, threats, species' range, disease and migration patterns.

History: 2009-Least Concern

Year Assessed: 2009

Assessors: S.Gombobaatar (NUM & MOS, Mongolia) & E.M.Monks (ZSL, UK).

Reviewers: J.Baillie (ZSL, UK), G.Mainjargal (MAS, Mongolia), P.Amartuvshin (MOS, Mongolia), and B.Enkh-Orshikh (MAS, Mongolia).

Global Distribution: Canada; United States; Bahamas; Turks and Caicos Islands; Saint Pierre and Miquelon; Bermuda; Greenland; Iceland; Morocco; Ireland; Portugal; Spain; Algeria; United Kingdom; Faroe Islands; France; Belgium; Netherlands; Norway; Luxembourg; Germany; Switzerland; Italy; Denmark; Austria; Svalbard and Jan Mayen; Sweden; Czech Republic; Slovenia; Poland; Malta; Croatia; Bosnia and Herzegovina; Hungary; Slovakia; Montenegro; Serbia; Greece; Romania; Finland; Latvia; Lithuania; Ukraine; Bulgaria; Estonia; Belarus; Turkey; Russian Federation; Kazakhstan; China; Mongolia; Democratic People's Republic of Korea; Republic of Korea; Japan.

Regional Distribution: This species winters and migrates through rocky tundra, cliffs along river banks, dry open habitats and mountain slopes in high mountains, edges of mountain forest, forest steppe, mountain steppe, desert steppe and valleys (Bold *et al.*, 2005; Gombobaatar, 2012) of Böhmörön, Sagsai Rivers and Achit Lake (Sh. Boldbaatar pers. comm.), Tes River and northern Uvs Lake (Northern Uvs Depression and Great Lakes Depression); N Khangai and Hövsgöl Mountain Ranges, including Darkhad Depression (except for forested mountain); lower Orkhon and Selenge Rivers (Orkhon-Selenge River basins); Tuul, Onon, Balj, and Ulz (north side) Rivers (Hentii Mountain Range and northern Mongol Daguur Steppe) (Kozlova, 1930&1932; Tarasov, 1960; Sumiya&Skryabin, 1989; Fomin & Bold, 1991; Dawaa *et al.*, 1994; Terbish & Gombobaatar, 2003; Tseveenmyadag & Bold, 2005; Boldbaatar, 2005; Boldbaatar, 2005a; Tseveenmyadag *et al.*, 2005; Sumiya, 2006; Boldbaatar, 2008).

Population: The global population consists of 40,000,000 mature individuals. Global breeding and resident ranges are 6,830,000 km² estimated in the World (BirdLife International, 2011). There is no population estimate for Mongolia.

Regional Population Trend: Stable.

Habitats & Ecology: In Mongolia, this is a winter visitor. Most wintering and migrating individuals arrive in wintering and feeding sites by mid-late November, depending on weather conditions. They join with flocks of Lapland Longspur and feed on seeds of various plants in open habitats of Mongolia. It forms large flocks consisting of 15-300 individuals and moves around and between areas where seeds of various plants are abundant. Large groups of the species leave the country by early February-late February-late March, depending on seed, snow cover and air temperature.

Habitat Type: 1. Forest (edge of 1.4.); 3. Shrub-land (3.3., 3.4.); 4. Grassland (4.4.); 5. Wetlands (valleys of 5.1.-5.8., 5.13.-5.17.); 6. Rocky areas (on passage); 8. Desert (8.2. on passage); 11. Artificial – Terrestrial (11.3., 11.4. only on passage).

Dominant Threats: 1. Habitat Loss and Degradation (human-induced)- 1.3. Extraction- 1.3.1. Mining / gold and other mining activities including oil and coal mining have directly and indirectly affected the species/, 1.4. Infrastructure development - 1.4.1. Industry- 1.4.2. Human settlement- 1.4.3. Tourism and recreation /building of human settlements, tourist camps, and ecotourism development near breeding and non-breeding sites are major disturbances for the species/; 4. Accidental mortality- 4.1. By-catch- 4.1.2. Terrestrial - 4.1.2.2. Shooting /see 3.5.1./- 4.1.2.3. Poisoning /chemicals such as rodenticide (Bromadilone) used against Brandt's Vole (*Lasiopodomys brandti*) remaining under snow/, 4.2. Collision-4.2.1. Pylon and building collision /this species hits high power electric lines/; 5. Persecution- 5.1. Pest control /see 4.1.2.3./; 6. Pollution (affecting habitat and species)-6.1. Atmospheric pollution- 6.1.1. Global warming /apparently due to global warming, their wintering habitats have been critically changing/-6.3.10. Noise pollution /noise from industry, transport and local herders/; 8. Changes in native species dynamics- 8.2. Predators /predators such as Saker Falcon and Merlin prey on the species/, 8.3. Prey or food base /a decrease of seeds caused by habitat loss, and drought/; 10. Human disturbance- 10.1. Recreation and tourism /construction of private houses, buildings, tourist camps and resorts, and others in breeding and migrating sites disturb this species/.

Conservation Measures: Approximately 7.8% of the species' range in Mongolia occurs within protected areas.

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ANNEXES

Annex I. Summary of criteria A-E used to evaluate threat status for Critically Endangered, Endangered or Vulnerable species

Use any of the criteria A-B	Critically Endangered	Endangered	Vulnerable
A. Population reduction	Declines measured over the longer of 10 years or 3 generations		
A1	≥ 90%	≥ 70%	≥ 50%
A2, A3 & A4	≥ 80%	≥ 50%	≥ 30%
A1. Population reduction observed, estimated, inferred, or suspected in the past where the causes of the reduction are clearly reversible AND understood AND ceased based on and specifying any of the following:			
	(a) direct observation		
	(b) an index of abundance appropriate to the taxon		
	(c) a decline in AOO, EOO and/or habitat quality		
	(d) actual or potential levels of exploitation		
	(e) effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites.		
A2. Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may not be reversible, based on (a) to (e) under A1			
A3. Population reduction projected or suspected to be met in the future (up to a maximum of 100 years) based on (b) to (e) under A1.			
A4. An observed, estimated, inferred, projected or suspected population reduction (up to a maximum of 100 years) where the time period must include both the past and the future, and where the causes of reduction may not have ceased OR may not be understood OR may not be reversible, based on (a) to (e) under A1.			
B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy)			
B1. Extent of occurrence	< 100 km ²	< 5,000 km ²	< 20,000 km ²
B2. Area of occupancy	< 10 km ²	< 500 km ²	< 2,000 km ²
and 2 of the following 3:			
(a) Severely fragmented or # locations	= 1	≤ 5	≤ 10
(b) Continuing decline in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) area, extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals			
(c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations; (iv) number of mature individuals			
C. Small population size and decline			
Number of mature individuals	< 250	< 2,500	< 10,000
and either C1 or C2:			
C1. An estimated continuing	25% in 3 years or 1 generation	20% in 5 years or 2 generations	10% in 10 years or 3 generations
up to a maximum of 100 years			
C2. A continuing decline and (a) and/or (b):			
a (i) # mature individuals in all sub-populations:	< 50	< 250	< 1,000
a (ii) or % individuals in one sub-population at least	90%	95%	100%
(b) extreme fluctuations in the number of mature individuals			
D. Very small or restricted population			
Either:			
(1) number of mature individuals	< 50	< 250	< 1,000
OR			
(2) restricted area of occupancy	na	na	AOO < 20 km ² or # locations ≤ 5
E. Quantitative Analysis			
Indicating the probability of extinction in the wild to be:	≥ 50% in 10 years or 3 generations (100 years max)	≥ 20% in 20 years or 5 generations (100 years max)	≥ 10% in 100 years

Annex II. List 1: Species identified as occurring within Mongolia and assessed at the Third International Mongolian Biodiversity Databank Workshop in 2009.

The Red List of Mongolian Birds and its associated documents were on the agreed list for the Third International Mongolian Biodiversity Databank Workshop that was held in Ulaanbaatar collaborating the experts of different national and international organizations in 2009. Due to taxonomy changes, additional data and information within the country, regional status for few species have been changed.

No	Scientific name	Common name	Regional Status	Global Status	Family	Order
1	<i>Acanthis cannabina</i>	Eurasian Linnet	DD	LC	Fringillidae	Passeriformes
2	<i>Acanthis flammea</i>	Common Redpoll	LC	LC	Fringillidae	Passeriformes
3	<i>Acanthis flavirostris</i>	Twite	LC	LC	Fringillidae	Passeriformes
4	<i>Acanthis hornemanni</i>	Hoary Redpoll	LC	LC	Fringillidae	Passeriformes
5	<i>Accipiter badius</i>	Shikra	NA	LC	Accipitridae	Falconiformes
6	<i>Accipiter gentilis</i>	Northern Goshawk	LC	LC	Accipitridae	Falconiformes
7	<i>Accipiter gularis</i>	Japanese Sparrow-hawk	LC	LC	Accipitridae	Falconiformes
8	<i>Accipiter nisus</i>	Eurasian Sparrow-hawk	LC	LC	Accipitridae	Falconiformes
9	<i>Acridotheres cristatellus</i>	Crested Myna	NA	LC	Sturnidae	Passeriformes
10	<i>Acrocephalus aedon</i>	Thick-billed Warbler	LC	LC	Sylviidae	Passeriformes
11	<i>Acrocephalus agricola</i>	Paddyfield Warbler	LC	LC	Sylviidae	Passeriformes
12	<i>Acrocephalus arundinaceus</i>	Great Reed-warbler	LC	LC	Sylviidae	Passeriformes
13	<i>Acrocephalus bistrigiceps</i>	Black-browed Reed-warbler	LC	LC	Sylviidae	Passeriformes
14	<i>Acrocephalus dumetorum</i>	Blyth's Reed-warbler	DD	LC	Sylviidae	Passeriformes
15	<i>Acrocephalus orientalis</i>	Oriental Reed-warbler	LC	NA	Sylviidae	Passeriformes
16	<i>Acrocephalus stentoreus</i>	Clamorous Reed-warbler	NA	LC	Sylviidae	Passeriformes
17	<i>Actitis hypoleucos</i>	Common Sandpiper	LC	LC	Scolopacidae	Charadriiformes
18	<i>Aegithalos caudatus</i>	Long-tailed Tit	LC	LC	Aegithalidae	Passeriformes
19	<i>Aegolius funereus</i>	Boreal Owl	LC	LC	Strigidae	Strigiformes
20	<i>Aegypius monachus</i>	Cinereous Vulture	LC	NT	Accipitridae	Falconiformes
21	<i>Aix galericulata</i>	Mandarin Duck	NA	LC	Anatidae	Anseriformes
22	<i>Alauda arvensis</i>	Eurasian Skylark	LC	LC	Alaudidae	Passeriformes
23	<i>Alcedo atthis</i>	Common Kingfisher	LC	LC	Alcedinidae	Coraciiformes
24	<i>Alectoris chukar</i>	Chukar	LC	LC	Phasianidae	Galliformes
25	<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	NA	LC	Rallidae	Gruiformes
26	<i>Anas acuta</i>	Northern Pintail	LC	LC	Anatidae	Anseriformes
27	<i>Anas clypeata</i>	Northern Shoveler	LC	LC	Anatidae	Anseriformes
28	<i>Anas crecca</i>	Eurasian Teal	LC	LC	Anatidae	Anseriformes
29	<i>Anas falcata</i>	Falcated Duck	NT	NT	Anatidae	Anseriformes
30	<i>Anas formosa</i>	Baikal Teal	VU	VU	Anatidae	Anseriformes
31	<i>Anas penelope</i>	Eurasian Wigeon	LC	LC	Anatidae	Anseriformes
32	<i>Anas platyrhynchos</i>	Mallard	LC	LC	Anatidae	Anseriformes
33	<i>Anas poecilorhyncha</i>	Spot-billed Duck	LC	LC	Anatidae	Anseriformes
34	<i>Anas querquedula</i>	Garganey	LC	LC	Anatidae	Anseriformes
35	<i>Anas strepera</i>	Gadwal	LC	LC	Anatidae	Anseriformes
36	<i>Anser albifrons</i>	Greater White-fronted Goose	NT	LC	Anatidae	Anseriformes
37	<i>Anser anser</i>	Greylag Goose	LC	LC	Anatidae	Anseriformes
38	<i>Anser cygnoides</i>	Swan Goose	NT	VU	Anatidae	Anseriformes
39	<i>Anser erythropus</i>	Lesser White-fronted Goose	VU	VU	Anatidae	Anseriformes
40	<i>Anser fabalis</i>	Bean Goose	LC	LC	Anatidae	Anseriformes

41	<i>Anser indicus</i>	Bar-headed Goose	LC	LC	Anatidae	Anseriformes
42	<i>Anthropoides virgo</i>	Demoiselle Crane	LC	LC	Gruidae	Gruiformes
43	<i>Anthus campestris</i>	Tawny Pipit	LC	LC	Motacillidae	Passeriformes
44	<i>Anthus cervinus</i>	Red-throated Pipit	LC	LC	Motacillidae	Passeriformes
45	<i>Anthus godlewskii</i>	Blyth's Pipit	LC	LC	Motacillidae	Passeriformes
46	<i>Anthus gustavi</i>	Pechora Pipit	LC	LC	Motacillidae	Passeriformes
47	<i>Anthus hodgsoni</i>	Olive-backed Pipit	LC	LC	Motacillidae	Passeriformes
48	<i>Anthus richardi</i>	Richard's Pipit	LC	LC	Motacillidae	Passeriformes
49	<i>Anthus rubescens</i>	American Pipit	LC	LC	Motacillidae	Passeriformes
50	<i>Anthus spinoletta</i>	Water Pipit	LC	LC	Motacillidae	Passeriformes
51	<i>Anthus trivialis</i>	Tree Pipit	NT	LC	Motacillidae	Passeriformes
52	<i>Apus apus</i>	Common Swift	LC	LC	Apodidae	Apodiformes
53	<i>Apus pacificus</i>	Fork-tailed Swift	LC	LC	Apodidae	Apodiformes
54	<i>Aquila chrysaetos</i>	Golden Eagle	LC	LC	Accipitridae	Falconiformes
55	<i>Aquila clanga</i>	Greater Spotted Eagle	EN	VU	Accipitridae	Falconiformes
56	<i>Aquila heliaca</i>	Eastern Imperial Eagle	VU	VU	Accipitridae	Falconiformes
57	<i>Aquila nipalensis</i>	Steppe Eagle	LC	LC	Accipitridae	Falconiformes
58	<i>Ardea cinerea</i>	Grey Heron	LC	LC	Ardeidae	Ciconiiformes
59	<i>Ardea purpurea</i>	Purple Heron	DD	LC	Ardeidae	Ciconiiformes
60	<i>Ardeola bacchus</i>	Chinese Pond Heron	NA	LC	Ardeidae	Ciconiiformes
61	<i>Arenaria interpres</i>	Ruddy Turnstone	LC	LC	Charadriidae	Charadriiformes
62	<i>Asio flammeus</i>	Short-eared Owl	LC	LC	Strigidae	Strigiformes
63	<i>Asio otus</i>	Long-eared Owl	LC	LC	Strigidae	Strigiformes
64	<i>Athene noctua</i>	Little Owl	LC	LC	Strigidae	Strigiformes
65	<i>Aythya baeri</i>	Baer's Pochard	NA	EN	Anatidae	Anseriformes
66	<i>Aythya ferina</i>	Common Pochard	LC	LC	Anatidae	Anseriformes
67	<i>Aythya fuligula</i>	Tufted Duck	LC	LC	Anatidae	Anseriformes
68	<i>Aythya marila</i>	Greater Scaup	NA	LC	Anatidae	Anseriformes
69	<i>Aythya nyroca</i>	Ferruginous Duck	VU	NT	Anatidae	Anseriformes
70	<i>Bombycilla garrulus</i>	Bohemian Waxwing	LC	LC	Bombycillidae	Passeriformes
71	<i>Bombycilla japonica</i>	Japanese Waxwing	NA	NT	Bombycillidae	Passeriformes
72	<i>Botaurus stellaris</i>	Great Bittern	LC	LC	Ardeidae	Ciconiiformes
73	<i>Bradypterus tacsanowskii</i>	Chinese Bush-warbler	LC	LC	Sylviidae	Passeriformes
74	<i>Bradypterus thoracicus</i>	Spotted Bush-warbler	DD	LC	Sylviidae	Passeriformes
75	<i>Bubo bubo</i>	Eurasian Eagle-owl	LC	LC	Strigidae	Strigiformes
76	<i>Bubulcus ibis</i>	Cattle Egret	NA	LC	Ardeidae	Ciconiiformes
77	<i>Bucanetes mongolicus</i>	Mongolian Finch	LC	LC	Fringillidae	Passeriformes
78	<i>Bucephala clangula</i>	Common Goldeneye	LC	LC	Anatidae	Anseriformes
79	<i>Burhinus oedicnemus</i>	Eurasian Thick-knee	NA	LC	Burhinidae	Charadriiformes
80	<i>Butastur indicus</i>	Grey-faced Buzzard	NA	LC	Accipitridae	Falconiformes
81	<i>Buteo buteo</i>	Common Buzzard	LC	LC	Accipitridae	Falconiformes
82	<i>Buteo hemilasius</i>	Upland Buzzard	LC	LC	Accipitridae	Falconiformes
83	<i>Buteo lagopus</i>	Rough-legged Buzzard	LC	LC	Accipitridae	Falconiformes
84	<i>Buteo rufinus</i>	Long-legged Buzzard	LC	LC	Accipitridae	Falconiformes
85	<i>Butorides striatus</i>	Striated Heron	NA	LC	Ardeidae	Ciconiiformes
86	<i>Calandrella brachydactyla</i>	Greater Short-toed Lark	LC	LC	Alaudidae	Passeriformes
87	<i>Calandrella cheleensis</i>	Asian Short-toed Lark	LC	LC	Alaudidae	Passeriformes
88	<i>Calandrella rufescens</i>	Lesser Short-toed Lark	LC	LC	Alaudidae	Passeriformes
89	<i>Calcarius lapponicus</i>	Lapland Longspur	LC	LC	Emberizidae	Passeriformes
90	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	LC	LC	Scolopacidae	Charadriiformes
91	<i>Calidris alba</i>	Sanderling	LC	LC	Scolopacidae	Charadriiformes

92	<i>Calidris alpina</i>	Dunlin	LC	LC	Scolopacidae	Charadriiformes
93	<i>Calidris canutus</i>	Red Knot	LC	LC	Scolopacidae	Charadriiformes
94	<i>Calidris ferruginea</i>	Curlew Sandpiper	LC	LC	Scolopacidae	Charadriiformes
95	<i>Calidris melanotos</i>	Pectoral Sandpiper	NA	LC	Scolopacidae	Charadriiformes
96	<i>Calidris minuta</i>	Little Stint	LC	LC	Scolopacidae	Charadriiformes
97	<i>Calidris ruficollis</i>	Red-necked Stint	LC	LC	Scolopacidae	Charadriiformes
98	<i>Calidris subminuta</i>	Long-toed Stint	LC	LC	Scolopacidae	Charadriiformes
99	<i>Calidris temminckii</i>	Temminck's Stint	LC	LC	Scolopacidae	Charadriiformes
100	<i>Caprimulgus europaeus</i>	Eurasian Nightjar	LC	LC	Caprimulgidae	Caprimulgiformes
101	<i>Caprimulgus indicus</i>	Grey Nightjar	LC	LC	Caprimulgidae	Caprimulgiformes
102	<i>Carduelis carduelis</i>	European Goldfinch	LC	LC	Fringillidae	Passeriformes
103	<i>Carduelis chloris</i>	European Greenfinch	NA	LC	Fringillidae	Passeriformes
104	<i>Carduelis sinica</i>	Grey-capped Greenfinch	NA	LC	Fringillidae	Passeriformes
105	<i>Carduelis spinus</i>	Eurasian Siskin	LC	LC	Fringillidae	Passeriformes
106	<i>Carpodacus erythrinus</i>	Common Rosefinch	LC	LC	Fringillidae	Passeriformes
107	<i>Carpodacus pulcherrimus</i>	Beautiful Rosefinch	LC	LC	Fringillidae	Passeriformes
108	<i>Carpodacus rhodochlamys</i>	Red-mantled Rosefinch	LC	LC	Fringillidae	Passeriformes
109	<i>Carpodacus roseus</i>	Pallas's Rosefinch	LC	LC	Fringillidae	Passeriformes
110	<i>Carpodacus rubicilla</i>	Great Rosefinch	LC	LC	Fringillidae	Passeriformes
111	<i>Certhia familiaris</i>	Eurasian Treecreeper	LC	LC	Certhiidae	Passeriformes
112	<i>Charadrius alexandrinus</i>	Kentish Plover	LC	LC	Charadriidae	Charadriiformes
113	<i>Charadrius dubius</i>	Little Ringed Plover	LC	LC	Charadriidae	Charadriiformes
114	<i>Charadrius hiaticula</i>	Common Ringed Plover	DD	LC	Charadriidae	Charadriiformes
115	<i>Charadrius leschenaultii</i>	Greater Sand Plover	LC	LC	Charadriidae	Charadriiformes
116	<i>Charadrius mongolus</i>	Lesser Sand Plover	DD	LC	Charadriidae	Charadriiformes
117	<i>Charadrius veredus</i>	Oriental Plover	LC	LC	Charadriidae	Charadriiformes
118	<i>Chlamydotis undulata</i>	Houbara Bustard	VU	VU	Otididae	Gruiformes
119	<i>Chlidonias hybrida</i>	Whiskered Tern	LC	LC	Laridae	Charadriiformes
120	<i>Chlidonias leucopterus</i>	White-winged Tern	LC	LC	Laridae	Charadriiformes
121	<i>Chlidonias niger</i>	Black Tern	LC	LC	Laridae	Charadriiformes
122	<i>Ciconia boyciana</i>	Oriental Stork	NA	EN	Ciconiidae	Ciconiiformes
123	<i>Ciconia nigra</i>	Black Stork	LC	LC	Ciconiidae	Ciconiiformes
124	<i>Cinclus cinclus</i>	White-throated Dipper	LC	LC	Cinclidae	Passeriformes
125	<i>Circaetus gallicus</i>	Short-toed Snake-eagle	LC	LC	Accipitridae	Falconiformes
126	<i>Circus aeruginosus</i>	Western Marsh-harrier	LC	LC	Accipitridae	Falconiformes
127	<i>Circus cyaneus</i>	Northern Harrier	LC	LC	Accipitridae	Falconiformes
128	<i>Circus macrourus</i>	Pallid Harrier	DD	NT	Accipitridae	Falconiformes
129	<i>Circus melanoleucos</i>	Pied Harrier	DD	LC	Accipitridae	Falconiformes
130	<i>Circus pygargus</i>	Montagu's Harrier	DD	LC	Accipitridae	Falconiformes
131	<i>Circus spilonotus</i>	Eastern Marsh-harrier	LC	LC	Accipitridae	Falconiformes
132	<i>Clangula hyemalis</i>	Long-tailed Duck	NA	LC	Anatidae	Anseriformes
133	<i>Coccothraustes coccothraustes</i>	Hawfinch	LC	LC	Fringillidae	Passeriformes
134	<i>Columba eversmanni</i>	Pale-backed Pigeon	NA	VU	Columbidae	Columbiformes
135	<i>Columba livia</i>	Rock Pigeon	LC	LC	Columbidae	Columbiformes
136	<i>Columba oenas</i>	Stock Dove	LC	LC	Columbidae	Columbiformes
137	<i>Columba palumbus</i>	Common Wood-pigeon	DD	LC	Columbidae	Columbiformes
138	<i>Columba rupestris</i>	Hill Pigeon	LC	LC	Columbidae	Columbiformes
139	<i>Corvus corax</i>	Common Raven	LC	LC	Corvidae	Passeriformes
140	<i>Corvus corone</i>	Carrion Crow	LC	LC	Corvidae	Passeriformes
141	<i>Corvus dauuricus</i>	Daurian Jackdaw	LC	LC	Corvidae	Passeriformes
142	<i>Corvus frugilegus</i>	Rook	LC	LC	Corvidae	Passeriformes

143	<i>Corvus monedula</i>	Eurasian Jackdaw	LC	LC	Corvidae	Passeriformes
144	<i>Coturnicops exquisitus</i>	Swinhoe's Rail	NA	VU	Rallidae	Gruiformes
145	<i>Coturnix coturnix</i>	Common Quail	DD	LC	Phasianidae	Galliformes
146	<i>Coturnix japonica</i>	Japanese Quail	LC	NT	Phasianidae	Galliformes
147	<i>Crex crex</i>	Corn Crane	DD	NT	Rallidae	Gruiformes
148	<i>Cuculus canorus</i>	Common Cuckoo	LC	LC	Cuculidae	Cuculiformes
149	<i>Cuculus micropterus</i>	Indian Cuckoo	NA	LC	Cuculidae	Cuculiformes
150	<i>Cuculus poliocephalus</i>	Lesser Cuckoo	NA	LC	Cuculidae	Cuculiformes
151	<i>Cuculus saturatus</i>	Oriental Cuckoo	LC	LC	Cuculidae	Cuculiformes
152	<i>Cyanopica cyanus</i>	Azure-winged Magpie	LC	LC	Corvidae	Passeriformes
153	<i>Cygnus columbianus</i>	Tundra Swan	LC	LC	Anatidae	Anseriformes
154	<i>Cygnus cygnus</i>	Whooper Swan	LC	LC	Anatidae	Anseriformes
155	<i>Cygnus olor</i>	Mute Swan	NT	LC	Anatidae	Anseriformes
156	<i>Delichon dasypus</i>	Asian House-martin	LC	LC	Hirundinidae	Passeriformes
157	<i>Delichon urbicum</i>	Northern House-martin	LC	LC	Hirundinidae	Passeriformes
158	<i>Dendrocopos hyperythrus</i>	Rufous-bellied Woodpecker	NA	LC	Picidae	Piciformes
159	<i>Dendrocopos leucotos</i>	White-backed Woodpecker	LC	LC	Picidae	Piciformes
160	<i>Dendrocopos major</i>	Great Spotted Woodpecker	LC	LC	Picidae	Piciformes
161	<i>Dendrocopos minor</i>	Lesser Spotted Woodpecker	LC	LC	Picidae	Piciformes
162	<i>Dendrocygna javanica</i>	Lesser Whistling-duck	NA	LC	Anatidae	Anseriformes
163	<i>Dendronanthus indicus</i>	Forest Wagtail	NA	LC	Motacillidae	Passeriformes
164	<i>Dicrurus macrocercus</i>	Black Drongo	NA	LC	Dicruridae	Passeriformes
165	<i>Dryocopus martius</i>	Black woodpecker	LC	LC	Picidae	Piciformes
166	<i>Egretta alba</i>	Great Egret	LC	LC	Ardeidae	Ciconiiformes
167	<i>Egretta garzetta</i>	Little Egret	NA	LC	Ardeidae	Ciconiiformes
168	<i>Emberiza aureola</i>	Yellow-breasted Bunting	NT	VU	Emberizidae	Passeriformes
169	<i>Emberiza bruniceps</i>	Red-headed Bunting	DD	LC	Emberizidae	Passeriformes
170	<i>Emberiza buchanani</i>	Grey-necked Bunting	LC	LC	Emberizidae	Passeriformes
171	<i>Emberiza chrysophrys</i>	Yellow-browed Bunting	LC	LC	Emberizidae	Passeriformes
172	<i>Emberiza cia</i>	Rock Bunting	LC	LC	Emberizidae	Passeriformes
173	<i>Emberiza cioides</i>	Meadow Bunting	LC	LC	Emberizidae	Passeriformes
174	<i>Emberiza citrinella</i>	Yellowhammer	LC	LC	Emberizidae	Passeriformes
175	<i>Emberiza elegans</i>	Yellow-throated Bunting	NA	LC	Emberizidae	Passeriformes
176	<i>Emberiza fucata</i>	Chestnut-eared Bunting	LC	LC	Emberizidae	Passeriformes
177	<i>Emberiza godlewskii</i>	Godlewski's Bunting	LC	LC	Emberizidae	Passeriformes
178	<i>Emberiza hortulana</i>	Ortolan Bunting	LC	LC	Emberizidae	Passeriformes
179	<i>Emberiza jankowskii</i>	Rufous-backed Bunting	NA	EN	Emberizidae	Passeriformes
180	<i>Emberiza leucocephalos</i>	Pine Bunting	LC	LC	Emberizidae	Passeriformes
181	<i>Emberiza melanocephala</i>	Black-headed Bunting	NA	LC	Emberizidae	Passeriformes
182	<i>Emberiza pallasi</i>	Pallas's Bunting	LC	LC	Emberizidae	Passeriformes
183	<i>Emberiza pusilla</i>	Little Bunting	LC	LC	Emberizidae	Passeriformes
184	<i>Emberiza rustica</i>	Rustic Bunting	LC	LC	Emberizidae	Passeriformes
185	<i>Emberiza rutila</i>	Chestnut Bunting	LC	LC	Emberizidae	Passeriformes
186	<i>Emberiza schoeniclus</i>	Reed Bunting	LC	LC	Emberizidae	Passeriformes
187	<i>Emberiza spodocephala</i>	Black-faced Bunting	LC	LC	Emberizidae	Passeriformes
188	<i>Emberiza tristrami</i>	Tristram's Bunting	NA	LC	Emberizidae	Passeriformes
189	<i>Emberiza yessoensis</i>	Ochre-rumped Bunting	NT	NT	Emberizidae	Passeriformes
190	<i>Eophona migratoria</i>	Yellow-billed Grosbeak	DD	LC	Fringillidae	Passeriformes
191	<i>Eremophila alpestris</i>	Horned Lark	LC	LC	Alaudidae	Passeriformes
192	<i>Erithacus rubecula</i>	European Robin	NA	LC	Muscicapidae	Passeriformes
193	<i>Eudromias morinellus</i>	Eurasian Dotterel	LC	LC	Charadriidae	Charadriiformes

194	<i>Eurystomus orientalis</i>	Asian Dollarbird	NA	LC	Coraciidae	Coraciiformes
195	<i>Falco amurensis</i>	Amur Falcon	LC	LC	Falconidae	Falconiformes
196	<i>Falco cherrug</i>	Saker Falcon	VU	VU	Falconidae	Falconiformes
197	<i>Falco columbarius</i>	Merlin	LC	LC	Falconidae	Falconiformes
198	<i>Falco naumanni</i>	Lesser Kestrel	LC	VU	Falconidae	Falconiformes
199	<i>Falco pelegrinoides</i>	Barbary Falcon	NA	LC	Falconidae	Falconiformes
200	<i>Falco peregrinus</i>	Peregrine Falcon	DD	LC	Falconidae	Falconiformes
201	<i>Falco rusticolus</i>	Gyr Falcon	DD	LC	Falconidae	Falconiformes
202	<i>Falco subbuteo</i>	Eurasian Hobby	LC	LC	Falconidae	Falconiformes
203	<i>Falco tinnunculus</i>	Common Kestrel	LC	LC	Falconidae	Falconiformes
204	<i>Falco vespertinus</i>	Red-footed Falcon	NA	NT	Falconidae	Falconiformes
205	<i>Ficedula albicilla</i>	Taiga Flycatcher	LC	LC	Muscicapidae	Passeriformes
206	<i>Ficedula hypoleuca</i>	European Pied Flycatcher	NA	LC	Muscicapidae	Passeriformes
207	<i>Ficedula mugimaki</i>	Mugimaki Flycatcher	LC	LC	Muscicapidae	Passeriformes
208	<i>Ficedula narcissina</i>	Narcissus Flycatcher	NA	LC	Muscicapidae	Passeriformes
209	<i>Ficedula zanthopygia</i>	Yellow-rumped Flycatcher	LC	LC	Muscicapidae	Passeriformes
210	<i>Fringilla coelebs</i>	Chaffinch	LC	LC	Fringillidae	Passeriformes
211	<i>Fringilla montifringilla</i>	Brambling	LC	LC	Fringillidae	Passeriformes
212	<i>Fulica atra</i>	Common Coot	LC	LC	Rallidae	Gruiformes
213	<i>Galerida cristata</i>	Crested Lark	LC	LC	Alaudidae	Passeriformes
214	<i>Gallinago gallinago</i>	Common Snipe	LC	LC	Scolopacidae	Charadriiformes
215	<i>Gallinago megala</i>	Swinhoe's Snipe	LC	LC	Scolopacidae	Charadriiformes
216	<i>Gallinago solitaria</i>	Solitary Snipe	LC	LC	Scolopacidae	Charadriiformes
217	<i>Gallinago stenura</i>	Pintail Snipe	LC	LC	Scolopacidae	Charadriiformes
218	<i>Gallinula chloropus</i>	Common Moorhen	LC	LC	Rallidae	Gruiformes
219	<i>Garrulus glandarius</i>	Eurasian Jay	LC	LC	Corvidae	Passeriformes
220	<i>Gavia arctica</i>	Arctic Loon	LC	LC	Gaviidae	Gaviiformes
221	<i>Gavia stellata</i>	Red-throated Loon	DD	LC	Gaviidae	Gaviiformes
222	<i>Glareola maldivarum</i>	Oriental Pratincole	DD	LC	Glareolidae	Charadriiformes
223	<i>Glaucidium passerinum</i>	Eurasian Pygmy-owl	LC	LC	Strigidae	Strigiformes
224	Great Bustard	Great Bustard	VU	VU	Otididae	Gruiformes
225	<i>Grus grus</i>	Common Crane	NT	LC	Gruidae	Gruiformes
226	<i>Grus japonensis</i>	Red-crowned Crane	NA	EN	Gruidae	Gruiformes
227	<i>Grus leucogeranus</i>	Siberian Crane	CR	CR	Gruidae	Gruiformes
228	<i>Grus monacha</i>	Hooded Crane	VU	VU	Gruidae	Gruiformes
229	<i>Grus vipio</i>	White-naped Crane	VU	VU	Gruidae	Gruiformes
230	<i>Gypaetus barbatus</i>	Lammergeier	VU	LC	Accipitridae	Falconiformes
231	<i>Gyps fulvus</i>	Griffon Vulture	LC	LC	Accipitridae	Falconiformes
232	<i>Gyps himalayensis</i>	Himalayan Vulture	LC	LC	Accipitridae	Falconiformes
233	<i>Halcyon pileata</i>	Black-capped Kingfisher	NA	LC	Alcedinidae	Coraciiformes
234	<i>Haliaeetus albicilla</i>	White-tailed Eagle	NT	LC	Accipitridae	Falconiformes
235	<i>Haliaeetus leucoryphus</i>	Pallas's Fish-eagle	EN	VU	Accipitridae	Falconiformes
236	<i>Heteroscelus brevipes</i>	Grey-tailed Tattler	NA	LC	Scolopacidae	Charadriiformes
237	<i>Heteroscelus incanus</i>	Wandering Tattler	NA	LC	Scolopacidae	Charadriiformes
238	<i>Hieraaetus fasciatus</i>	Bonelli's Eagle	NA	LC	Accipitridae	Falconiformes
239	<i>Hieraaetus pennatus</i>	Booted Eagle	LC	LC	Accipitridae	Falconiformes
240	<i>Himantopus himantopus</i>	Black-winged Stilt	LC	LC	Recurvirostridae	Charadriiformes
241	<i>Hippolais caligata</i>	Booted Warbler	LC	LC	Sylviidae	Passeriformes
242	<i>Hirundapus caudacutus</i>	White-throated Needletail	LC	LC	Apodidae	Apodiformes
243	<i>Hirundo daurica</i>	Red-rumped Swallow	LC	LC	Hirundinidae	Passeriformes
244	<i>Hirundo rustica</i>	Barn Swallow	LC	LC	Hirundinidae	Passeriformes

245	<i>Histrionicus histrionicus</i>	Harlequin Duck	NA	LC	Anatidae	Anseriformes
246	<i>Ixobrychus eurhythmus</i>	Schrenck's Bittern	NA	LC	Ardeidae	Ciconiiformes
247	<i>Ixobrychus minutus</i>	Little Bittern	LC	LC	Ardeidae	Ciconiiformes
248	<i>Jynx torquilla</i>	Eurasian Wryneck	LC	LC	Picidae	Piciformes
249	<i>Lagopus lagopus</i>	Willow Ptarmigan	LC	LC	Tetraonidae	Galliformes
250	<i>Lagopus muta</i>	Rock Ptarmigan	LC	LC	Tetraonidae	Galliformes
251	<i>Lanius bucephalus</i>	Bull-headed Shrike	NA	LC	Laniidae	Passeriformes
252	<i>Lanius cristatus</i>	Brown Shrike	LC	LC	Laniidae	Passeriformes
253	<i>Lanius excubitor</i>	Great Grey Shrike	LC	LC	Laniidae	Passeriformes
254	<i>Lanius isabellinus</i>	Rufous-tailed Shrike	LC	LC	Laniidae	Passeriformes
255	<i>Lanius minor</i>	Lesser Grey Shrike	DD	LC	Laniidae	Passeriformes
256	<i>Lanius schach</i>	Long-tailed Shrike	NA	LC	Laniidae	Passeriformes
257	<i>Lanius sphenocercus</i>	Chinese Grey Shrike	DD	LC	Laniidae	Passeriformes
258	<i>Larus brunnicephalus</i>	Brown-headed Gull	NA	LC	Laridae	Charadriiformes
259	<i>Larus canus</i>	Mew Gull	LC	LC	Laridae	Charadriiformes
260	<i>Larus crassirostris</i>	Black-tailed Gull	NA	LC	Laridae	Charadriiformes
261	<i>Larus genei</i>	Slender-billed Gull	NA	LC	Laridae	Charadriiformes
262	<i>Larus hyperboreus</i>	Glaucous Gull	NA	LC	Laridae	Charadriiformes
263	<i>Larus ichthyaetus</i>	Pallas's Gull	LC	LC	Laridae	Charadriiformes
264	<i>Larus minutus</i>	Little Gull	LC	LC	Laridae	Charadriiformes
265	<i>Larus mongolicus</i>	Mongolian Gull	LC	LC	Laridae	Charadriiformes
266	<i>Larus relictus</i>	Relict Gull	EN	VU	Laridae	Charadriiformes
267	<i>Larus ridibundus</i>	Black-headed Gull	LC	LC	Laridae	Charadriiformes
268	<i>Leucosticte arctoa</i>	Asian Rosy-finch	LC	LC	Fringillidae	Passeriformes
269	<i>Leucosticte brandti</i>	Black-headed Mountain-finch	LC	LC	Fringillidae	Passeriformes
270	<i>Leucosticte nemoricola</i>	Plain Mountain-finch	LC	LC	Fringillidae	Passeriformes
271	<i>Limicola falcinellus</i>	Broad-billed Sandpiper	LC	LC	Scolopacidae	Charadriiformes
272	<i>Limnodromus scolopaceus</i>	Long-billed Dowitcher	NA	LC	Scolopacidae	Charadriiformes
273	<i>Limnodromus semipalmatus</i>	Asian Dowitcher	VU	NT	Scolopacidae	Charadriiformes
274	<i>Limosa lapponica</i>	Bar-tailed Godwit	LC	LC	Scolopacidae	Charadriiformes
275	<i>Limosa limosa</i>	Black-tailed Godwit	LC	NT	Scolopacidae	Charadriiformes
276	<i>Locustella certhiola</i>	Pallas's Grasshopper-warbler	LC	LC	Sylviidae	Passeriformes
277	<i>Locustella fasciolata</i>	Gray's Grasshopper-warbler	DD	LC	Sylviidae	Passeriformes
278	<i>Locustella lanceolata</i>	Lanceolated Warbler	LC	LC	Sylviidae	Passeriformes
279	<i>Locustella luscinioides</i>	Savi's Warbler	DD	LC	Sylviidae	Passeriformes
280	<i>Locustella naevia</i>	Common Grasshopper-warbler	LC	LC	Sylviidae	Passeriformes
281	<i>Locustella ochotensis</i>	Middendorff's Warbler	DD	LC	Sylviidae	Passeriformes
282	<i>Loxia curvirostra</i>	Red Crossbill	LC	LC	Fringillidae	Passeriformes
283	<i>Loxia leucoptera</i>	White-winged Crossbill	LC	LC	Fringillidae	Passeriformes
284	<i>Luscinia calliope</i>	Siberian Rubythroat	LC	LC	Muscicapidae	Passeriformes
285	<i>Luscinia cyane</i>	Siberian Blue Robin	LC	LC	Muscicapidae	Passeriformes
286	<i>Luscinia megarhynchos</i>	Common Nightingale	DD	LC	Muscicapidae	Passeriformes
287	<i>Luscinia sibilans</i>	Rufous-tailed Robin	NA	LC	Muscicapidae	Passeriformes
288	<i>Luscinia svecica</i>	Bluethroat	LC	LC	Muscicapidae	Passeriformes
289	<i>Lymnocyptes minimus</i>	Jack Snipe	DD	LC	Scolopacidae	Charadriiformes
290	<i>Lyrurus tetrix</i>	Black Grouse	LC	LC	Tetraonidae	Galliformes
291	<i>Megalurus pryeri</i>	Marsh Grassbird	DD	NT	Sylviidae	Passeriformes
292	<i>Melanitta fusca</i>	White-winged Scoter	LC	LC	Anatidae	Anseriformes
293	<i>Melanocorypha leucoptera</i>	White-winged Lark	NA	LC	Alaudidae	Passeriformes
294	<i>Melanocorypha mongolica</i>	Mongolian Lark	LC	LC	Alaudidae	Passeriformes
295	<i>Melanocorypha yeltoniensis</i>	Black Lark	NA	LC	Alaudidae	Passeriformes

296	<i>Mergus albellus</i>	Smew	LC	LC	Anatidae	Anseriformes
297	<i>Mergus merganser</i>	Common Merganser	LC	LC	Anatidae	Anseriformes
298	<i>Mergus serrator</i>	Red-breasted Merganser	LC	LC	Anatidae	Anseriformes
299	<i>Merops apiaster</i>	European Bee-eater	NA	LC	Meropidae	Coraciiformes
300	<i>Milvus migrans</i>	Black Kite	LC	LC	Accipitridae	Falconiformes
301	<i>Monticola saxatilis</i>	Rufous-tailed Rock-thrush	LC	LC	Muscicapidae	Passeriformes
302	<i>Monticola solitarius</i>	Blue Rock-thrush	NA	LC	Muscicapidae	Passeriformes
303	<i>Montifringilla nivalis</i>	White-winged Snowfinch	LC	LC	Passeridae	Passeriformes
304	<i>Motacilla alba</i>	White Wagtail	LC	LC	Motacillidae	Passeriformes
305	<i>Motacilla cinerea</i>	Grey Wagtail	LC	LC	Motacillidae	Passeriformes
306	<i>Motacilla citreola</i>	Citrine Wagtail	LC	LC	Motacillidae	Passeriformes
307	<i>Motacilla flava</i>	Yellow Wagtail	LC	LC	Motacillidae	Passeriformes
308	<i>Muscicapa dauurica</i>	Asian Brown Flycatcher	LC	LC	Muscicapidae	Passeriformes
309	<i>Muscicapa griseisticta</i>	Grey-streaked Flycatcher	NA	LC	Muscicapidae	Passeriformes
310	<i>Muscicapa sibirica</i>	Dark-sided Flycatcher	LC	LC	Muscicapidae	Passeriformes
311	<i>Muscicapa striata</i>	Spotted Flycatcher	LC	LC	Muscicapidae	Passeriformes
312	<i>Neophron percnopterus</i>	Egyptian Vulture	NA	EN	Accipitridae	Falconiformes
313	<i>Netta rufina</i>	Red-crested Pochard	LC	LC	Anatidae	Anseriformes
314	<i>Nisaetus nipalensis</i>	Mountain Hawk-eagle	NA	LC	Accipitridae	Falconiformes
315	<i>Nucifraga caryocatactes</i>	Spotted Nutcracker	LC	LC	Corvidae	Passeriformes
316	<i>Numenius arquata</i>	Eurasian Curlew	LC	LC	Scolopacidae	Charadriiformes
317	<i>Numenius madagascariensis</i>	Far Eastern Curlew	LC	VU	Scolopacidae	Charadriiformes
318	<i>Numenius minutus</i>	Little Curlew	LC	LC	Scolopacidae	Charadriiformes
319	<i>Numenius phaeopus</i>	Whimbrel	LC	LC	Scolopacidae	Charadriiformes
320	<i>Nyctea scandiaca</i>	Snowy Owl	LC	LC	Strigidae	Strigiformes
321	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	NA	LC	Ardeidae	Ciconiiformes
322	<i>Oenanthe deserti</i>	Desert Wheatear	LC	LC	Muscicapidae	Passeriformes
323	<i>Oenanthe isabellina</i>	Isabelline Wheatear	LC	LC	Muscicapidae	Passeriformes
324	<i>Oenanthe oenanthe</i>	Northern Wheatear	LC	LC	Muscicapidae	Passeriformes
325	<i>Oenanthe pleschanka</i>	Pied Wheatear	LC	LC	Muscicapidae	Passeriformes
326	<i>Oriolus chinensis</i>	Black-naped Oriole	NA	LC	Oriolidae	Passeriformes
327	<i>Oriolus oriolus</i>	Eurasian Golden Oriole	DD	LC	Oriolidae	Passeriformes
328	<i>Otus scops</i>	Common Scops-owl	LC	LC	Strigidae	Strigiformes
329	<i>Otus sunia</i>	Oriental Scops-owl	NA	LC	Strigidae	Strigiformes
330	<i>Oxyura leucocephala</i>	White-headed Duck	EN	EN	Anatidae	Anseriformes
331	<i>Pandion haliaetus</i>	Osprey	LC	LC	Accipitridae	Falconiformes
332	<i>Panurus biarmicus</i>	Bearded Parrotbill	LC	LC	Timaliidae	Passeriformes
333	<i>Paradoxornis heudei</i>	Reed Parrotbill	EN	NT	Timaliidae	Passeriformes
334	<i>Paradoxornis webbianus</i>	Vinous-throated Parrotbill	NA	LC	Timaliidae	Passeriformes
335	<i>Parus ater</i>	Coal Tit	LC	LC	Paridae	Passeriformes
336	<i>Parus cinctus</i>	Siberian Tit	LC	LC	Paridae	Passeriformes
337	<i>Parus cyanus</i>	Azure Tit	LC	LC	Paridae	Passeriformes
338	<i>Parus major</i>	Great Tit	LC	LC	Paridae	Passeriformes
339	<i>Parus montanus</i>	Willow Tit	LC	LC	Paridae	Passeriformes
340	<i>Parus palustris</i>	Marsh Tit	LC	LC	Paridae	Passeriformes
341	<i>Passer ammodendri</i>	Saxaul Sparrow	LC	LC	Passeridae	Passeriformes
342	<i>Passer domesticus</i>	House Sparrow	LC	LC	Passeridae	Passeriformes
343	<i>Passer montanus</i>	Eurasian Tree Sparrow	LC	LC	Passeridae	Passeriformes
344	<i>Pelecanus crispus</i>	Dalmatian Pelican	CR	VU	Pelecanidae	Pelecaniformes
345	<i>Perdix dauurica</i>	Daurian Partridge	LC	LC	Phasianidae	Galliformes
346	<i>Perisoreus infaustus</i>	Siberian Jay	LC	LC	Corvidae	Passeriformes

347	<i>Pernis apivorus</i>	European Honey-buzzard	NA	LC	Accipitridae	Falconiformes
348	<i>Pernis ptilorhynchus</i>	Oriental Honey-buzzard	LC	LC	Accipitridae	Falconiformes
349	<i>Petronia petronia</i>	Rock Sparrow	LC	LC	Passeridae	Passeriformes
350	<i>Petrophila gularis</i>	White-throated Rock-thrush	DD	LC	Muscicapidae	Passeriformes
351	<i>Phalacrocorax carbo</i>	Great Cormorant	LC	LC	Phalacrocoracidae	Pelecaniformes
352	<i>Phalaropus fulicarius</i>	Red Phalarope	NA	LC	Scolopacidae	Charadriiformes
353	<i>Phalaropus lobatus</i>	Red-necked Phalarope	LC	LC	Scolopacidae	Charadriiformes
354	<i>Phasianus colchicus</i>	Common Pheasant	NT	LC	Phasianidae	Galliformes
355	<i>Philomachus pugnax</i>	Ruff	LC	LC	Scolopacidae	Charadriiformes
356	<i>Phoenicopterus roseus</i>	Greater Flamingo	NA	LC	Phoenicopteridae	Phoenicopteriformes
357	<i>Phoenicurus aureus</i>	Daurian Redstart	LC	LC	Muscicapidae	Passeriformes
358	<i>Phoenicurus erythrogastrus</i>	White-winged Redstart	LC	LC	Muscicapidae	Passeriformes
359	<i>Phoenicurus erythronotus</i>	Rufous-backed Redstart	LC	LC	Muscicapidae	Passeriformes
360	<i>Phoenicurus ochruros</i>	Black redstart	LC	LC	Muscicapidae	Passeriformes
361	<i>Phoenicurus phoenicurus</i>	Common Redstart	LC	LC	Muscicapidae	Passeriformes
362	<i>Phylloscopus armandii</i>	Yellow-streaked Warbler	NA	LC	Sylviidae	Passeriformes
363	<i>Phylloscopus borealis</i>	Arctic Warbler	LC	LC	Sylviidae	Passeriformes
364	<i>Phylloscopus collybita</i>	Common Chiffchaff	LC	LC	Sylviidae	Passeriformes
365	<i>Phylloscopus fuscatus</i>	Dusky Warbler	LC	LC	Sylviidae	Passeriformes
366	<i>Phylloscopus griseolus</i>	Sulphur-bellied Warbler	LC	LC	Sylviidae	Passeriformes
367	<i>Phylloscopus humei</i>	Hume's Leaf-warbler	LC	LC	Sylviidae	Passeriformes
368	<i>Phylloscopus inornatus</i>	Inornate Warbler,	LC	LC	Sylviidae	Passeriformes
369	<i>Phylloscopus proregulus</i>	Pallas's Leaf-warbler	LC	LC	Sylviidae	Passeriformes
370	<i>Phylloscopus schwarzi</i>	Radde's Warbler	LC	LC	Sylviidae	Passeriformes
371	<i>Phylloscopus sibilatrix</i>	Wood Warbler	NA	LC	Sylviidae	Passeriformes
372	<i>Phylloscopus tenellipes</i>	Pale-legged Leaf-warbler	LC	LC	Sylviidae	Passeriformes
373	<i>Phylloscopus trochiloides</i>	Greenish Warbler	LC	LC	Sylviidae	Passeriformes
374	<i>Phylloscopus trochilus</i>	Willow Warbler	LC	LC	Sylviidae	Passeriformes
375	<i>Pica pica</i>	Black-billed Magpie	LC	LC	Corvidae	Passeriformes
376	<i>Picoides tridactylus</i>	Eurasian Three-toed Woodpecker	LC	LC	Picidae	Piciformes
377	<i>Picus canus</i>	Grey-faced Woodpecker	LC	LC	Picidae	Piciformes
378	<i>Pinicola enucleator</i>	Pine Grosbeak	LC	LC	Fringillidae	Passeriformes
379	<i>Platalea leucorodia</i>	Eurasian Spoonbill	LC	LC	Threskiornithidae	Ciconiiformes
380	<i>Plectrophenax nivalis</i>	Snow Bunting	LC	LC	Emberizidae	Passeriformes
381	<i>Pluvialis fulva</i>	Pacific Golden Plover	LC	LC	Charadriidae	Charadriiformes
382	<i>Pluvialis squatarola</i>	Grey Plover	LC	LC	Charadriidae	Charadriiformes
383	<i>Podiceps auritus</i>	Horned Grebe	LC	LC	Podicipedidae	Podicipediformes
384	<i>Podiceps cristatus</i>	Great Crested Grebe	LC	LC	Podicipedidae	Podicipediformes
385	<i>Podiceps grisegena</i>	Red-necked Grebe	LC	LC	Podicipedidae	Podicipediformes
386	<i>Podiceps nigricollis</i>	Black-necked Grebe	LC	LC	Podicipedidae	Podicipediformes
387	<i>Podiceps ruficollis</i>	Little Grebe	LC	LC	Podicipedidae	Podicipediformes
388	<i>Podoces hendersoni</i>	Mongolian Ground-jay	LC	LC	Corvidae	Passeriformes
389	<i>Porzana parva</i>	Little Crake	NA	LC	Rallidae	Gruiformes
390	<i>Porzana porzana</i>	Spotted Crake	DD	LC	Rallidae	Gruiformes
391	<i>Porzana pusilla</i>	Baillon's Crake	LC	LC	Rallidae	Gruiformes
392	<i>Prunella atrogularis</i>	Black-throated Accentor	LC	LC	Prunellidae	Passeriformes
393	<i>Prunella collaris</i>	Alpine Accentor	LC	LC	Prunellidae	Passeriformes
394	<i>Prunella fulvescens</i>	Brown Accentor	LC	LC	Prunellidae	Passeriformes
395	<i>Prunella himalayana</i>	Rufous-streaked Accentor	LC	LC	Prunellidae	Passeriformes
396	<i>Prunella koslowi</i>	Mongolian Accentor	LC	LC	Prunellidae	Passeriformes
397	<i>Prunella montanilla</i>	Siberian Accentor	LC	LC	Prunellidae	Passeriformes

398	<i>Ptyonoprogne rupestris</i>	Eurasian Crag-martin	LC	LC	Hirundinidae	Passeriformes
399	<i>Pycnonotus flavescens</i>	Flavescent Bulbul	NA	LC	Pycnonotidae	Passeriformes
400	<i>Pyrgilauda davidiana</i>	Small Snowfinch	LC	LC	Passeridae	Passeriformes
401	<i>Pyrrhonorax pyrrhonorax</i>	Red-billed Chough	LC	LC	Corvidae	Passeriformes
402	<i>Pyrrhula pyrrhula</i>	Eurasian Bullfinch	LC	LC	Fringillidae	Passeriformes
403	<i>Rallus aquaticus</i>	Water Rail	LC	LC	Rallidae	Gruiformes
404	<i>Recurvirostra avosetta</i>	Pied Avocet	LC	LC	Recurvirostridae	Charadriiformes
405	<i>Regulus regulus</i>	Goldcrest	LC	LC	Regulidae	Passeriformes
406	<i>Remiz coronatus</i>	White-crowned Penduline-tit	LC	LC	Remizidae	Passeriformes
407	<i>Rhodospiza obsoletus</i>	Desert Finch	NA	LC	Fringillidae	Passeriformes
408	<i>Rhodostethia rosea</i>	Ross's Gull	NA	LC	Laridae	Charadriiformes
409	<i>Rhopophilus pekinensis</i>	White-browed Chinese Warbler	NA	LC	Cisticolidae	Passeriformes
410	<i>Riparia riparia</i>	Sand Martin	LC	LC	Hirundinidae	Passeriformes
411	<i>Rissa tridactyla</i>	Black-legged Kittiwake	NA	LC	Laridae	Charadriiformes
412	<i>Rostratula benghalensis</i>	Greater Painted-snipe	NA	LC	Rostratulidae	Charadriiformes
413	<i>Saxicola insignis</i>	White-throated Bushchat	NT	VU	Muscicapidae	Passeriformes
414	<i>Saxicola torquatus</i>	Common Stonechat	LC	LC	Muscicapidae	Passeriformes
415	<i>Scolopax rusticola</i>	Eurasian Woodcock	LC	LC	Scolopacidae	Charadriiformes
416	<i>Serinus pusillus</i>	Fire-fronted Serin	LC	LC	Fringillidae	Passeriformes
417	<i>Sitta europaea</i>	Wood Nuthatch	LC	LC	Sittidae	Passeriformes
418	<i>Stercorarius parasiticus</i>	Parasitic Jaeger	NA	LC	Stercorariidae	Charadriiformes
419	<i>Stercorarius pomarinus</i>	Pomarine Jaeger	NA	LC	Stercorariidae	Charadriiformes
420	<i>Sterna albifrons</i>	Little Tern	LC	LC	Laridae	Charadriiformes
421	<i>Sterna caspia</i>	Caspian Tern	LC	LC	Laridae	Charadriiformes
422	<i>Sterna hirundo</i>	Common Tern	LC	LC	Laridae	Charadriiformes
423	<i>Sterna nilotica</i>	Gull-billed Tern	LC	LC	Laridae	Charadriiformes
424	<i>Sterna paradisaea</i>	Arctic Tern	NA	LC	Laridae	Charadriiformes
425	<i>Streptopelia decaocto</i>	Eurasian Collared-dove	LC	LC	Columbidae	Columbiformes
426	<i>Streptopelia orientalis</i>	Oriental Turtle-dove	LC	LC	Columbidae	Columbiformes
427	<i>Streptopelia senegalensis</i>	Laughing Dove	NA	LC	Columbidae	Columbiformes
428	<i>Streptopelia turtur</i>	European Turtle-dove	DD	LC	Columbidae	Columbiformes
429	<i>Strix nebulosa</i>	Great Grey Owl	LC	LC	Strigidae	Strigiformes
430	<i>Strix uralensis</i>	Ural Owl	LC	LC	Strigidae	Strigiformes
431	<i>Sturnia sturnina</i>	Purple-backed Starling	LC	LC	Sturnidae	Passeriformes
432	<i>Sturnus cineraceus</i>	White-cheeked Starling	LC	LC	Sturnidae	Passeriformes
433	<i>Sturnus roseus</i>	Rosy Starling	LC	LC	Sturnidae	Passeriformes
434	<i>Sturnus vulgaris</i>	Common Starling	LC	LC	Sturnidae	Passeriformes
435	<i>Surnia ulula</i>	Northern Hawk-owl	LC	LC	Strigidae	Strigiformes
436	<i>Sylvia althaea</i>	Hume's Whitethroat	LC	LC	Sylviidae	Passeriformes
437	<i>Sylvia atricapilla</i>	Blackcap	NA	LC	Sylviidae	Passeriformes
438	<i>Sylvia communis</i>	Greater Whitethroat	LC	LC	Sylviidae	Passeriformes
439	<i>Sylvia curruca</i>	Lesser Whitethroat	LC	LC	Sylviidae	Passeriformes
440	<i>Sylvia nana</i>	Asian Desert Warbler	LC	LC	Sylviidae	Passeriformes
441	<i>Sylvia nisoria</i>	Barred Warbler	LC	LC	Sylviidae	Passeriformes
442	<i>Syrrhaptes paradoxus</i>	Pallas's Sandgrouse	LC	LC	Pteroclididae	Columbiformes
443	<i>Tadorna ferruginea</i>	Ruddy Shelduck	LC	LC	Anatidae	Anseriformes
444	<i>Tadorna tadorna</i>	Common Shelduck	LC	LC	Anatidae	Anseriformes
445	<i>Tarsiger cyanurus</i>	Orange-flanked Bush-robin	LC	LC	Muscicapidae	Passeriformes
446	<i>Tetrao parvirostris</i>	Black-billed Capercaillie	LC	LC	Tetraonidae	Galliformes
447	<i>Tetrao urogallus</i>	Western Capercaillie	NA	LC	Tetraonidae	Galliformes
448	<i>Tetraogallus altaicus</i>	Altai Snowcock	NT	LC	Phasianidae	Galliformes

449	<i>Tetrastes bonasia</i>	Hazel Grouse	LC	LC	Tetraonidae	Galliformes
450	<i>Threskiornis melanocephalus</i>	Black-headed Ibis	NA	NT	Threskiornithidae	Ciconiiformes
451	<i>Tichodroma muraria</i>	Wallcreeper	LC	LC	Sittidae	Passeriformes
452	<i>Tringa erythropus</i>	Spotted Redshank	LC	LC	Scolopacidae	Charadriiformes
453	<i>Tringa glareola</i>	Wood Sandpiper	LC	LC	Scolopacidae	Charadriiformes
454	<i>Tringa nebularia</i>	Common Greenshank	LC	LC	Scolopacidae	Charadriiformes
455	<i>Tringa ochropus</i>	Green Sandpiper	LC	LC	Scolopacidae	Charadriiformes
456	<i>Tringa stagnatilis</i>	Marsh Sandpiper	LC	LC	Scolopacidae	Charadriiformes
457	<i>Tringa totanus</i>	Common Redshank	LC	LC	Scolopacidae	Charadriiformes
458	<i>Troglodytes troglodytes</i>	Winter Wren	LC	LC	Troglodytidae	Passeriformes
459	<i>Turdus iliacus</i>	Redwing	NA	LC	Turdidae	Passeriformes
460	<i>Turdus merula</i>	Eurasian Blackbird	NA	LC	Turdidae	Passeriformes
461	<i>Turdus naumanni</i>	Naumann's Thrush	LC	LC	Turdidae	Passeriformes
462	<i>Turdus obscurus</i>	Eyebrowed Thrush	LC	LC	Turdidae	Passeriformes
463	<i>Turdus pallidus</i>	Pale Thrush	LC	LC	Turdidae	Passeriformes
464	<i>Turdus philomelos</i>	Song Thrush	LC	LC	Turdidae	Passeriformes
465	<i>Turdus pilaris</i>	Fieldfare	LC	LC	Turdidae	Passeriformes
466	<i>Turdus ruficollis</i>	Red-throated Thrush	LC	LC	Turdidae	Passeriformes
467	<i>Turdus viscivorus</i>	Mistle Thrush	LC	LC	Turdidae	Passeriformes
468	<i>Turnix tanki</i>	Yellow-legged Buttonquail	NA	LC	Turnicidae	Gruiformes
469	<i>Upupa epops</i>	Eurasian Hoopoe	LC	LC	Upupidae	Upupiformes
470	<i>Uragus sibiricus</i>	Long-tailed Rosefinch	LC	LC	Fringillidae	Passeriformes
471	<i>Vanellus cinereus</i>	Grey-headed Lapwing	NA	LC	Charadriidae	Charadriiformes
472	<i>Vanellus gregarius</i>	Sociable Lapwing	NA	CR	Charadriidae	Charadriiformes
473	<i>Vanellus vanellus</i>	Northern Lapwing	LC	LC	Charadriidae	Charadriiformes
474	<i>Xenus cinereus</i>	Terek Sandpiper	LC	LC	Scolopacidae	Charadriiformes
475	<i>Zoothera dauma</i>	Scaly Thrush	LC	LC	Turdidae	Passeriformes
476	<i>Zoothera sibirica</i>	Siberian Thrush	LC	LC	Turdidae	Passeriformes

Annex III. List of habitat types used by IUCN Red List

1. Forest	
	1.1. Boreal
	1.2. Subarctic
	1.3. Subantarctic
	1.4. Temperate
	1.5. Subtropical/Tropical Dry
	1.6. Subtropical/Tropical Moist Lowland
	1.7. Subtropical/Tropical Mangrove
	1.8. Subtropical/Tropical Swamp
	1.9. Subtropical/Tropical Moist Mountain
2. Savanna	
	2.1. Dry
	2.2. Moist
3. Shrub-land	
	3.1. Subarctic
	3.2. Subantarctic
	3.3. Boreal
	3.4. Temperate
	3.5. Subtropical/Tropical Dry
	3.6. Subtropical/Tropical Moist
	3.7. Subtropical/Tropical High Altitude
	3.8. Mediterranean-type Shrubby Vegetation
4. Grassland	
	4.1. Tundra
	4.2. Subarctic
	4.3. Subantarctic
	4.4. Temperate
	4.5. Steppe
	4.6. Subtropical/Tropical Seasonally Wet/Flooded Lowland
	4.7. Subtropical/Tropical High Altitude
5. Wetlands (inland)	
	5.1. Permanent Rivers/Streams/Creeks [includes waterfalls]
	5.2. Seasonal/Intermittent/Irregular Rivers/Streams/Creeks
	5.3. Shrub Dominated Wetlands
	5.4. Bogs, Marshes, Swamps, Fens, Peatlands
	5.5. Permanent Freshwater Lakes [over 8 ha]
	5.6. Seasonal/Intermittent Freshwater Lakes [over 8 ha]
	5.7. Permanent Freshwater Marshes/Pools [under 8 ha]
	5.8. Seasonal/Intermittent Freshwater Marshes/Pools [under 8 ha]
	5.9. Freshwater Springs and Oases
	5.10. Tundra Wetlands [includes pools and temporary waters from snowmelt]
	5.11. Alpine Wetlands [includes temporary waters from snowmelt]
	5.12. Geothermal Wetlands
	5.13. Permanent Inland the delta ofs
	5.14. Permanent Saline, Brackish or Alkaline Lakes
	5.15. Seasonal/Intermittent Saline, Brackish or Alkaline Lakes and Flats

	5.16. Permanent Saline, Brackish or Alkaline Marshes/Pools
	5.17. Seasonal/Intermittent Saline, Brackish or Alkaline Marshes/Pools
	5.18. Karst and Other Subterranean Hydrological Systems [inland]
6. Rocky areas [e.g. inland cliffs, mountain peaks]	
7. Caves and Subterranean Habitats (non-aquatic)	
	7.1. Caves
	7.2. Other Subterranean Habitats
8. Desert	
	8.1. Hot
	8.2. Temperate
	8.3. Cold
9. Sea	
	9.1. Open
	9.2. Shallow [usually less than 6 m deep at low tide; includes sea bays and straits]
	9.3. Subtidal Aquatic Beds [kelp beds, sea- grass beds and tropical marine meadows]
	9.4. Coral Reefs
10. Coastline	
	10.1. Rocky Shores [includes rocky offshore islands and sea cliffs]
	10.2. Sand, Shingle or Pebble Shores [includes sand bars, spits, sandy islets, dune systems]
	10.3. Estuarine Waters
	10.4. Intertidal Mud, Sand or Salt Flats
	10.5. Intertidal Marshes [includes salt marshes]
	10.6. Coastal Brackish/Saline Lagoons
	10.7. Coastal Freshwater Lagoons
	10.8. Karst and Other Subterranean Hydrological Systems [marine/coastal]
11. Artificial - Terrestrial	
	11.1. Arable Land
	11.2. Pastureland
	11.3. Plantations
	11.4. Rural Gardens
	11.5. Urban Areas
	11.6. Subtropical/Tropical Heavily Degraded Former Forest
12. Artificial - Aquatic	
	12.1. Water Storage Areas (over 8 ha)
	12.2. Ponds (below 8 ha)
	12.3. Aquaculture Ponds
	12.4. Salt Exploitation Sites
	12.5. Excavations (open)
	12.6. Wastewater Treatment Areas
	12.7. Irrigated Land [includes irrigation channels]
	12.8. Seasonally Flooded Agricultural Land
	12.9. Canals and Drainage Channels, Ditches
	12.10. Karst and Other Subterranean Hydrological Systems [human-made]
13. Introduced Vegetation	
14. Other	
15. Unknown	

Annex IV. List of threats used by IUCN Red List

0. No threats
1. Habitat Loss and Degradation (human-induced)
1.1. Agriculture
1.1.1. Crops
1.1.1.1. Shifting agriculture
1.1.1.2. Small-holder farming
1.1.1.3. Agro-industry farming
1.1.2. Wood plantations
1.1.2.1. Small-scale
1.1.2.2. Large-scale
1.1.3. Non-timber plantations
1.1.3.1. Small-scale
1.1.3.2. Large-scale
1.1.4. Livestock
1.1.4.1. Nomadic
1.1.4.2. Small-holder
1.1.4.3. Agro-industry
1.1.5. Abandonment
1.1.6. Marine aquaculture
1.1.7. Freshwater aquaculture
1.1.8. Other
1.1.9. Unknown
1.2. Land management of non-agricultural areas
1.2.1. Abandonment
1.2.2. Change of management regime
1.2.3. Other
1.2.4. Unknown
1.3. Extraction
1.3.1. Mining
1.3.2. Fisheries
1.3.2.1. Subsistence
1.3.2.2. Artisanal /small-scale
1.3.2.3. Large-scale/industrial
1.3.3. Wood
1.3.3.1. Small-scale subsistence
1.3.3.2. Selective logging
1.3.3.3. Clear-cutting
1.3.4. Non-woody vegetation collection
1.3.5. Coral removal
1.3.6. Groundwater extraction
1.3.7. Other
1.3.8. Unknown
1.4. Infrastructure development
1.4.1. Industry
1.4.2. Human settlement
1.4.3. Tourism and recreation

1.4.4. Transport - land/air
1.4.5. Transport – water
1.4.6. Dams
1.4.7. Telecommunications
1.4.8. Power lines
1.4.9. Other
1.4.10. Unknown
1.5. Invasive alien species (directly impacting habitat)
1.6. Change in native species dynamics (directly impacting habitat)
1.7. Fires
1.8. Other causes
1.9. Unknown causes
2. Invasive alien species (directly affecting the species)
2.1. Competitors
2.2. Predators
2.3. Hybridizers
2.4. Pathogens/parasites
2.5. Other
2.6. Unknown
3. Harvesting [hunting/gathering]
3.1. Food
3.1.1. Subsistence use/local trade
3.1.2. Sub-national/national trade
3.1.3. Regional/international trade
3.2. Medicine
3.2.1. Subsistence use/local trade
3.2.2. Sub-national/national trade
3.2.3. Regional/international trade
3.3. Fuel
3.3.1. Subsistence use/local trade
3.3.2. Sub-national/national trade
3.3.3. Regional/international trade
3.4. Materials
3.4.1. Subsistence use/local trade
3.4.2. Sub-national/national trade
3.4.3. Regional/international trade
3.5. Cultural/scientific/leisure activities
3.5.1. Subsistence use/local trade
3.5.2. Sub-national/national trade
3.5.3. Regional/international trade
3.6. Other
3.7. Unknown
4. Accidental mortality
4.1. By-catch
4.1.1. Fisheries-related
4.1.1.1. Hooking
4.1.1.2. Netting
4.1.1.3. Entanglement

4.1.1.4. Dynamite
4.1.1.5. Poisoning
4.1.2. Terrestrial
4.1.2.1. Trapping/snaring/netting
4.1.2.2. Shooting
4.1.2.3. Poisoning
4.1.3. Other
4.1.4. Unknown
4.2. Collision
4.2.1. Pylon and building collision
4.2.2. Vehicle collision
4.2.3. Other
4.2.4. Unknown
4.3. Other
4.4. Unknown
5. Persecution
5.1. Pest control
5.2. Other
5.3. Unknown
6. Pollution (affecting habitat and/or species)
6.1. Atmospheric pollution
6.1.1. Global warming/oceanic warming
6.1.2. Acid precipitation
6.1.3. Ozone hole effects
6.1.4. Smog
6.1.5. Other
6.1.6. Unknown
6.2. Land pollution
6.2.1. Agricultural
6.2.2. Domestic
6.2.3. Commercial/Industrial
6.2.4. Other non-agricultural
6.2.5. Light pollution
6.2.6. Other
6.2.7. Unknown
6.3. Water pollution
6.3.1. Agricultural
6.3.2. Domestic
6.3.3. Commercial/Industrial
6.3.4. Other non-agricultural
6.3.5. Thermal pollution
6.3.6. Oil slicks
6.3.7. Sediment
6.3.8. Sewage
6.3.9. Solid waste
6.3.10. Noise pollution
6.3.11. Other
6.3.12. Unknown

6.4. Other
6.5. Unknown
7. Natural disasters
7.1. Drought
7.2. Storms/flooding
7.3. Temperature extremes
7.4. Wildfire
7.5. Volcanoes
7.6. Avalanches/landslides
7.7. Other
7.8. Unknown
8. Changes in native species dynamics
8.1. Competitors
8.2. Predators
8.3. Prey/food base
8.4. Hybridizers
8.5. Pathogens/parasites
8.6. Mutualisms
8.7. Other
8.8. Unknown
9. Intrinsic Factors
9.1. Limited dispersal
9.2. Poor recruitment/reproduction/regeneration
9.3. High juvenile mortality
9.4. Inbreeding
9.5. Low densities
9.6. Skewed sex ratios
9.7. Slow growth rates
9.8. Population fluctuations
9.9. Restricted range
9.10. Other
9.11. Unknown
10. Human disturbance
10.1. Recreation/tourism
10.2. Research
10.3. War/civil unrest
10.4. Transport
10.5. Fire
10.6. Other
10.7. Unknown
11. Other
12. Unknown

Annex Y. List of possible occurring species in Mongolia near future

We have listed the species that suspected or most likely to occur in Mongolia near future based on records and occurrence to neighbouring countries but have not been confirmed yet within the country.

No	Scientific name	Common name	Possible occurring areas within Mongolia
1	<i>Tetraogallus tibetanus</i>	Tibetan Snowcock	South-western Mongolia
2	<i>Mergus squamatus</i>	Scaly-sided Merganser	Eastern Mongolia (Khalkh- Nömrög-Khyangan range)
3	<i>Coracias garrulus</i>	European Roller	Western Mongolia (Mongol-Altai mountain, Bayan-Ölgii and Khovd provinces)
4	<i>Streptopelia tranquebarica</i>	Red-collared Dove	Southern Mongolia (Ömnögobi, Gobi-Altai provinces)
5	<i>Pterocles orientalis</i>	Black-bellied Sandgrouse	Western Mongolia (Mongol-Altai mountain, Bayan-Ölgii and Khovd provinces)
6	<i>Calidris tenuirostris</i>	Great Knot	North-eastern and Eastern Mongolia (Herlen river valley, Khalkh and Nömrög river basins, Khyangan range)
7	<i>Charadrius placidus</i>	Long-billed Plover	North-eastern and Eastern Mongolia (Herlen river valley, Khalkh and Nömrög river basins, Khyangan range)
8	<i>Larus vigae</i>	Vega Gull	North-eastern and Eastern Mongolia (Herlen river valley, Khalkh and Nömrög river basins, Khyangan range)
9	<i>Larus saundersi</i>	Saunders's Gull	North-eastern and Eastern Mongolia (Ulz and Herlen river valleys, Khalkh and Nömrög river basins, Khyangan range)
10	<i>Ixobrychus sinensis</i>	Yellow Bittern	Eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan range)
11	<i>Platalea minor</i>	Black-faced Spoonbill	Eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan range)
12	<i>Ciconia ciconia</i>	White Stork	North-western Mongolia (Bayan-Ölgii and Uvs provinces)
13	<i>Urocissa erythrorhyncha</i>	Red-billed Blue Magpie	South-eastern Mongolia (Dornogobi and Suhbaatar provinces)
14	<i>Dicrurus leucophaeus</i>	Ashy Drongo	South-central Mongolia
15	<i>Pyrrhocorax graculus</i>	Yellow-billed Chough	South-western Mongolia (Ömnögobi province, Gobi-Altai mountain range)
16	<i>Corvus macrorhynchos</i>	Large-billed Crow	South-eastern Mongolia (Dornogobi and Suhbaatar provinces)
17	<i>Pericrocotus divaricatus</i>	Ashy Minivet	Eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan mountain range)
18	<i>Turdus hortulorum</i>	Grey-backed Thrush	Eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan mountain range)
19	<i>Cyanoptila cyanomelana</i>	Blue-and-white Flycatcher	South-eastern Mongolia (Dornogobi and Suhbaatar provinces) and eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan mountain range)
20	<i>Remiz consobrinus</i>	Chinese Penduline-tit	Eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan mountain range)
21	<i>Cettia cettia</i>	Cetti's Bush-warbler	Bulgan river of Bulgan sum of Khovd province
22	<i>Acrocephalus tangorum</i>	Manchurian Reed Warbler	Eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan mountain range)
23	<i>Phylloscopus coronatus</i>	Eastern Crowned-warbler	North-eastern and Eastern Mongolia (Herlen river valley, Khalkh and Nömrög river basins, Khyangan range)
24	<i>Melanocorypha bimaculata</i>	Bimaculated Lark	Western Mongolia (Mongol-Altai mountain, Bayan-Ölgii and Khovd provinces) in winter
25	<i>Alauda gulgula</i>	Oriental Skylark	South-western Mongolia (Ömnögobi and Gobi-Altai provinces)
26	<i>Montifringilla adamsi</i>	Tibetan Snowfinch	South-western Mongolia (Ömnögobi and Gobi-Altai provinces) in winter
27	<i>Pyrgilauda blanfordi</i>	Plain-backed Mountain- finch	South-western Mongolia (Ömnögobi and Gobi-Altai provinces) in winter
28	<i>Eophena personata</i>	Japanese Grosbeak	Eastern Mongolia (Khalkh and Nömrög river basins, and Khyangan mountain range)

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Red-necked Stint	181	Siberian Blue Robin	373
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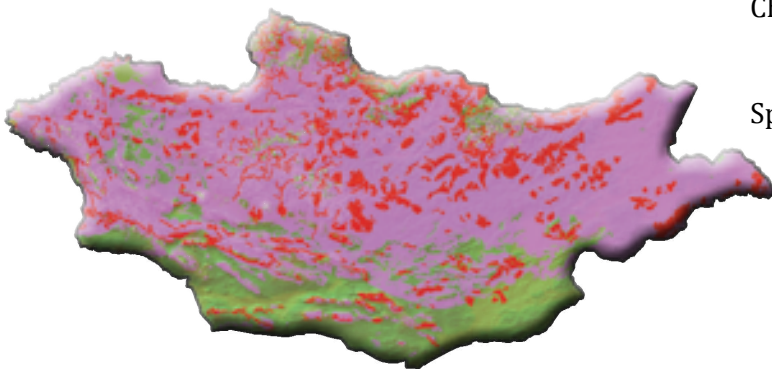
Siberian Jay	269	Water Rail	122
Siberian Rubythroat	371	Western Capercaillie	3
Siberian Thrush	357	Western Marsh-harrier	97
Siberian Tit	286	Whimbrel	164
Slender-billed Gull	200	Whiskered Tern	210
Small Snowfinch	404	White Wagtail	412
Smew	46	White-backed Woodpecker	254
Snow Bunting	476	White-breasted Waterhen	124
Snowy Owl	231	White-browed Chinese Warbler	306
Sociable Lapwing	142	White-cheeked Starling	356
Solitary Snipe	155	White-crowned Penduline-tit	289
Song Thrush	366	White-headed Duck	49
Spot-billed Duck	30	White-naped Crane	131
Spotted Bush-warbler	308	White-tailed Eagle	90
Spotted Crake	127	White-throated Bushchat	380
Spotted Flycatcher	389	White-throated Dipper	398
Spotted Nutcracker	274	White-throated Needletail	243
Spotted Redshank	167	White-throated Rock-thrush	387
Steppe Eagle	113	White-winged Crossbill	449
Stock Dove	218	White-winged Lark	298
Striated Heron	66	White-winged Redstart	379
Sulphur-bellied Warbler	329	White-winged Scoter	43
Swan Goose	14	White-winged Snowfinch	403
Swinhoe's Rail	121	White-winged Tern	211
Swinhoe's Snipe	157	Whooper Swan	21
Taiga Flycatcher	397	Willow Ptarmigan	5
Tawny Pipit	417	Willow Tit	285
Temminck's Stint	182	Willow Warbler	325
Terek Sandpiper	173	Winter Wren	348
Thick-billed Warbler	323	Wood Nuthatch	349
Tree Pipit	419	Wood Sandpiper	172
Tristram's Bunting	461	Wood Warbler	327
Tufted Duck	40	Yellow Wagtail	414
Tundra Swan	22	Yellow-billed Grosbeak	452
Twite	434	Yellow-breasted Bunting	467
Upland Buzzard	110	Yellow-browed Bunting	464
Ural Owl	233	Yellowhammer	453
Vinous-throated Parrotbill	345	Yellow-legged Buttonquail	136
Wallcreeper	350	Yellow-rumped Flycatcher	394
Wandering Tattler	176	Yellow-streaked Warbler	330
Water Pipit	423	Yellow-throated Bunting	466

SPECIES DISTRIBUTION MAPS AND PHOTOGRAPHS



Chicks of Eurasian Eagle-owl *Bubo bubo*
Photograph courtesy of S.Gombobaatar

Species distribution maps *drawn by S.Gombobaatar*



SPECIES DISTRIBUTION MAPS AND PHOTOGRAPHS

Abbreviations for distribution maps:

Red -breeding records and potential breeding sites

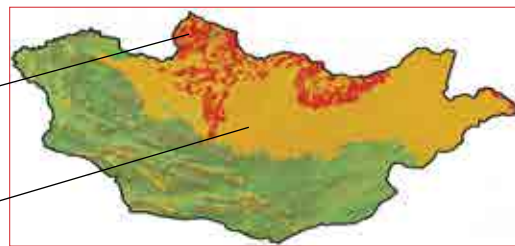
Orange- passage migrating and summering sites

Dark pink -wintering sites and staying all year around

Pale yellow-partial migrating sites

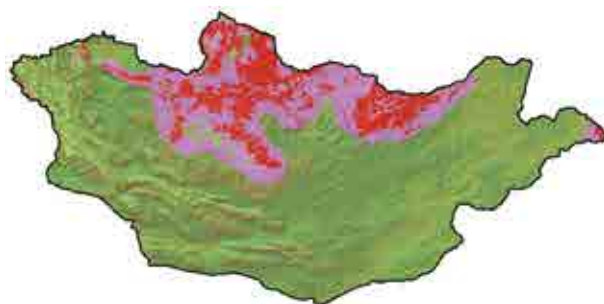
Blue-winter visiting sites

Dark-green -occasional and accidental records



These photographs can help you for species identification.



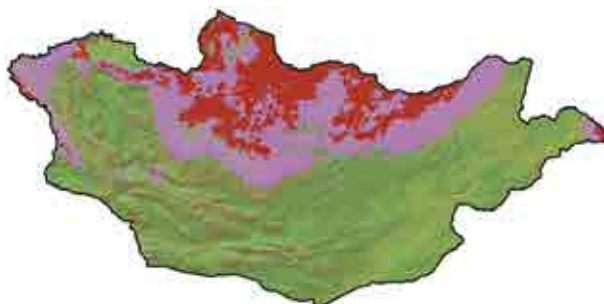


1. Hazel Grouse

Bonasia bonasia

Breeding adult male.

Photograph by S.Gombobaatar©



2. Black Grouse

Tetrao tetrix

Breeding adult male (above) and adult female (below).

Photograph by K.H. Schindlatz© and Kh.Tumendelger©

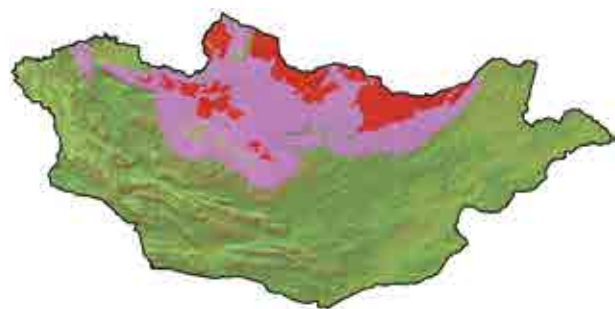


3. Western Capercaillie

Tetrao urogallus

Adult male (left) and adult female (right) in Finland.

Photograph by Jari Peltomaki©

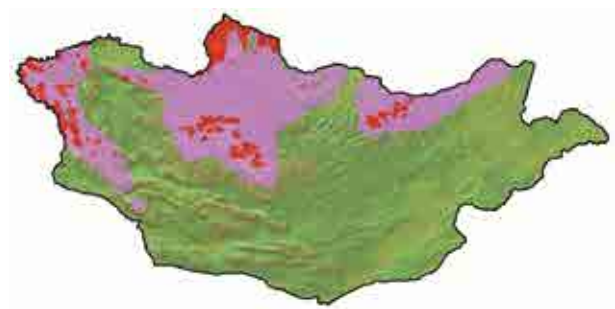


4. Black-billed Capercaillie

Tetrao parvirostris

Breeding adult male (left) and adult females (right).

Photograph by K.H. Schindlatz©

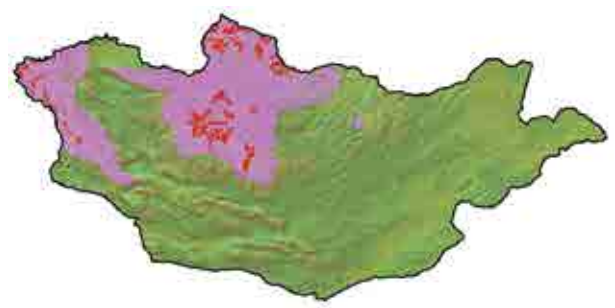


5. Willow Ptarmigan

Lagopus lagopus

Adult female in summer plumage and adult male in flight.

Photograph by Eugene Potapov©

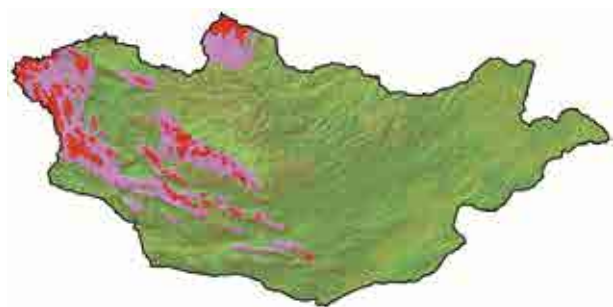


6. Rock Ptarmigan *Lagopus muta*

Adult male in breeding plumage (right).

Adult male (above) and female (below) in non-breeding plumage in Japan (left).

Photograph by Akira Nomura©

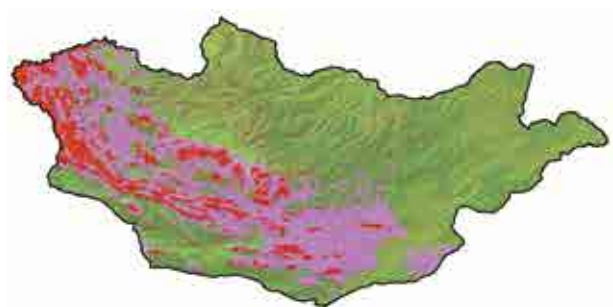


7. Altai Snowcock

Tetraogallus altaicus

Adult.

Photograph by Kh.Tumendelger©

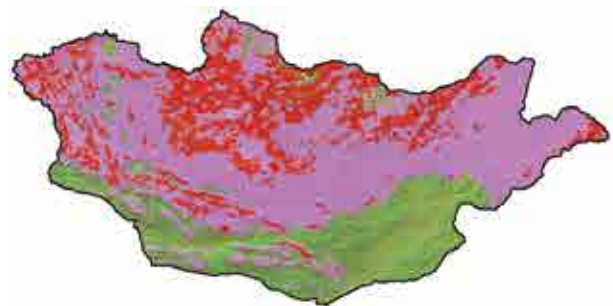


8. Chukar

Alectoris chukar

Breeding adult male.

Photograph by S.Gombobaatar©



9. Daurian Partridge

Perdix dauurica

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©

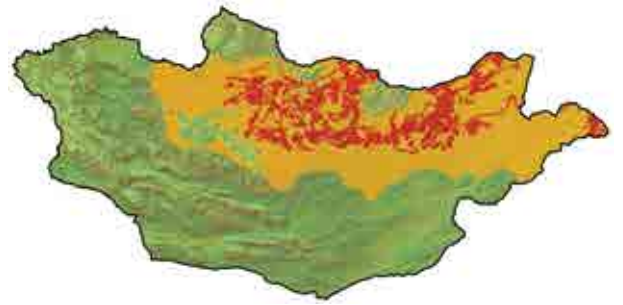


10. Common Quail

Coturnix coturnix

Adult female in Israel.

Photograph by S.Gombobaatar©



11. Japanese Quail

Coturnix japonica

Breeding adult male (right) and female (left).

Photograph by S.Gombobaatar©



12. Common Pheasant

Phasianus colchicus

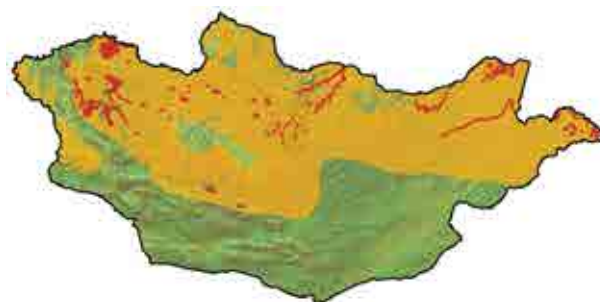
Adult male.

Photograph by S.Shar©



13. Lesser Whistling-duck
Dendrocygna javanica
Adult in India.

Photograph by Nitin Srinivasamurthy©



14. Swan Goose
Anser cygnoides
Breeding adult.

Photograph by S.Gombobaatar©



15. Bean Goose
Anser fabalis
Adult.

Photograph by S.Gombobaatar©



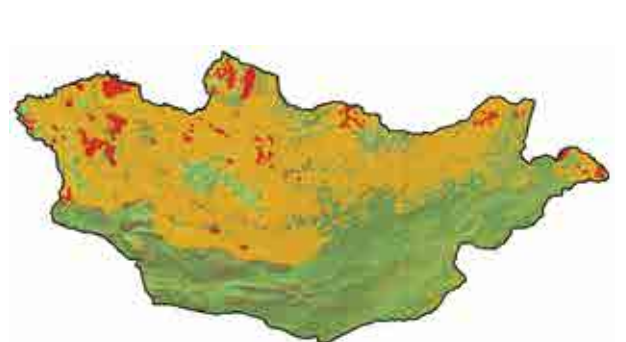
16. Greater White-fronted Goose
Anser albifrons
Adult in Japan.

Photograph by S.Gombobaatar©



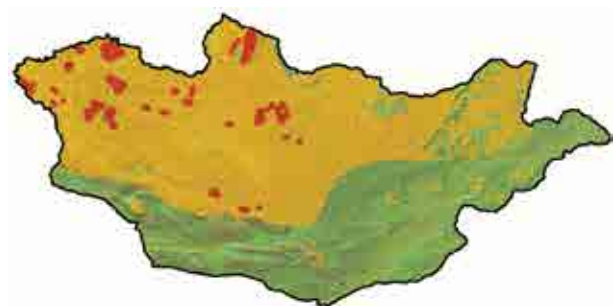
17. Lesser White-fronted Goose
Anser erythropus
Adult in Japan.

Photograph by S.Gombobaatar©



18. Greylag Goose
Anser anser
Breeding adult male and female.

Photograph by S.Gombobaatar©

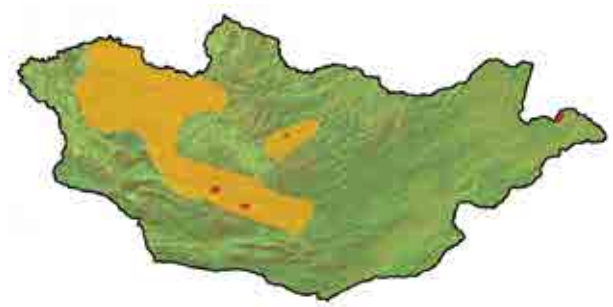


19. Bar-headed Goose

Anser indicus

Breeding adult female.

Photograph by S.Gombobaatar©

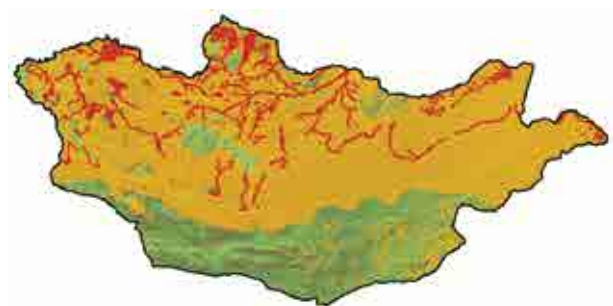


20. Mute Swan

Cygnus olor

Adult.

Photograph by S.Gombobaatar©



21. Whooper Swan

Cygnus cygnus

Breeding adults.

Photograph by S.Gombobaatar©

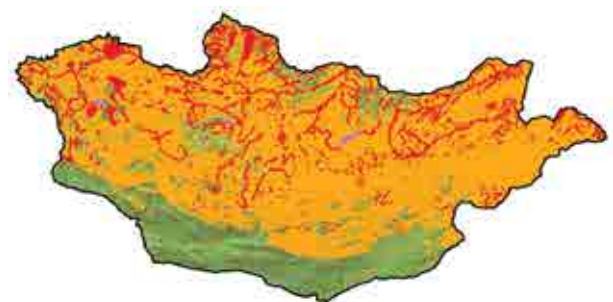


22. Tundra Swan

Cygnus columbianus

Adult in Japan.

Photograph by S.Gombobaatar©

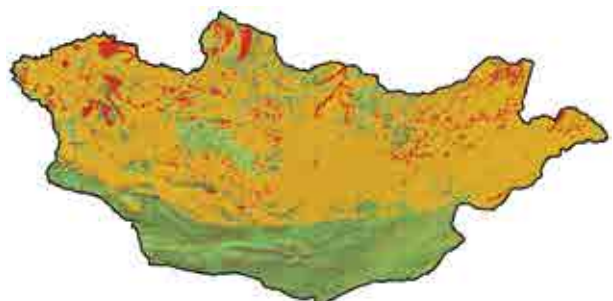


23. Ruddy Shelduck

Tadorna ferruginea

Breeding adult male (left) and female (right).

Photograph by S.Gombobaatar©



24. Common Shelduck

Tadorna tadorna

Breeding adult male (above) and female with chicks (below).

Photograph by S.Gombobaatar©

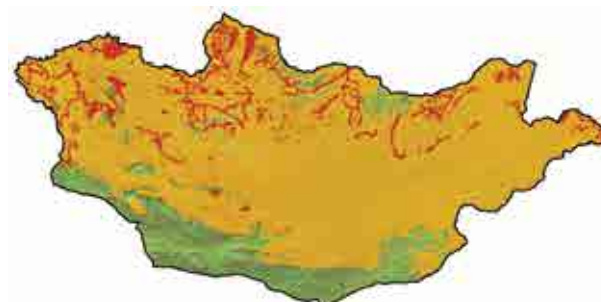


25. Mandarin Duck

Aix galericulata

Breeding adult male (left) and female (right) in South Korea.

Photograph by S.Gombobaatar©



26. Gadwall

Anas strepera

Breeding adult male (right) and female (left).

Photograph by S.Gombobaatar©

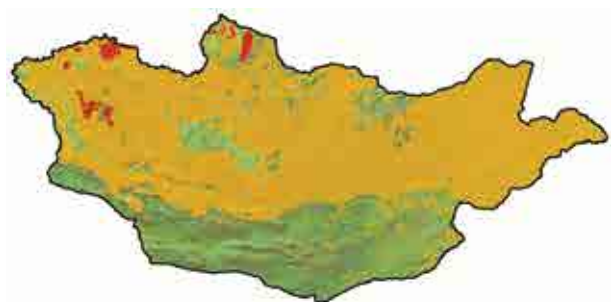


27. Falcated Duck

Anas falcata

Breeding adult male (above) and imm. male (below) in Japan.

Photograph by Yasuo Watanabe©

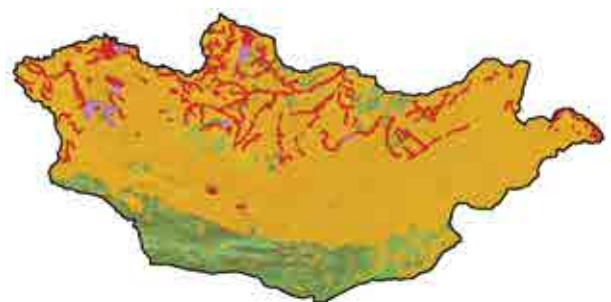


28. Eurasian Wigeon

Anas penelope

Breeding adult male (right) and adult female (left).

Photograph by S.Gombobaatar©

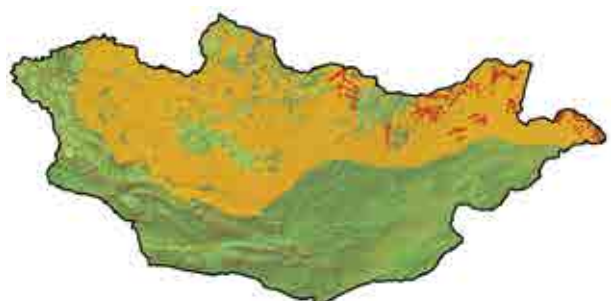


29. Mallard

Anas platyrhynchos

Breeding adult male (right) and female (left).

Photograph by S.Gombobaatar©

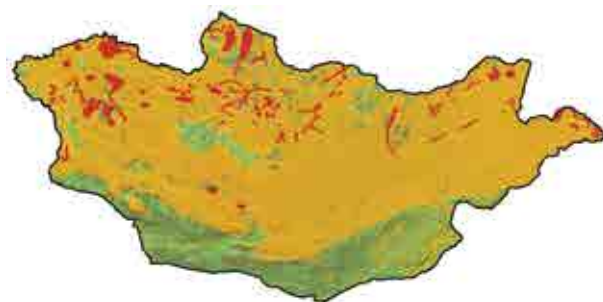


30. Spot-billed Duck

Anas poecilorhyncha

Breeding adult male and female.

Photograph by S.Gombobaatar©



31. Northern Shoveler

Anas clypeata

Breeding adult male (right) and female (left).

Photograph by S.Gombobaatar©

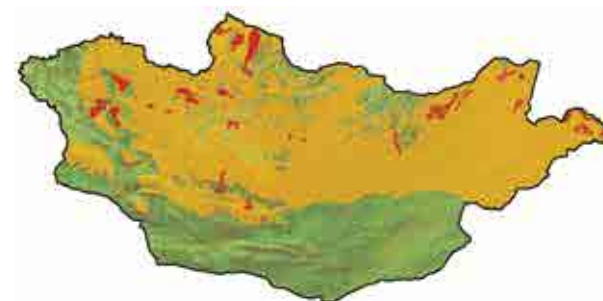


32. Northern Pintail

Anas acuta

Breeding adult male (right) and female (left).

Photograph by S.Gombobaatar©



33. Garganey

Anas querquedula

Breeding adult male (above) and female (below) in Japan.

Photograph by Yasuo Watanabe©

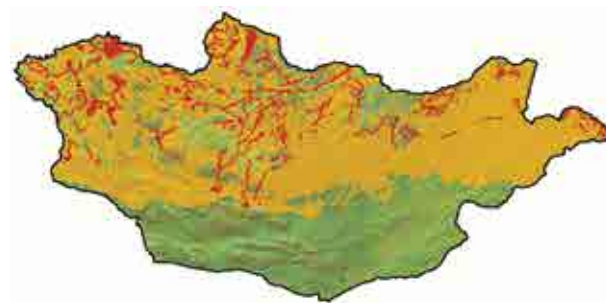


34. Baikal Teal

Anas formosa

Adult male (above) and adult female (below).

Photograph by B.Gantulga© and S. Gombobaatar©



35. Common Teal

Anas crecca

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



36. Red-crested Pochard

Netta rufina

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



37. Common Pochard

Aythya ferina

Breeding adult male (above) and female (below).

Photograph by S.Gombobaatar©



38. Ferruginous Duck

Aythya nyroca

Adult male (above) and adult female (below).

Photograph by Yasuo Watanabe©



39. Baer's Pochard

Aythya baeri

Adult male (above) and female (below).

Photograph by Yasuo Watanabe©



40. Tufted Duck

Aythya fuligula

Breeding adult male (above) and female (below).

Photograph by S.Gombobaatar©



41. Greater Scaup

Aythya marila

Adult male (above) and female (below).

Photograph by S.Gombobaatar© and T.Ikeuchi©



42. Harlequin Duck

Histrionicus histrionicus

Adult male (above) and adult females (below).

Photograph by Richard Reading© and Akira Nomura©



43. White-winged Scoter

Melanitta fusca

Non-breeding females.

Photograph by S.Gombobaatar©

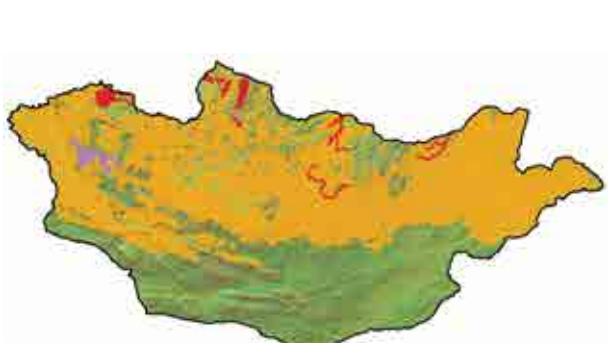


44. Long-tailed Duck

Clangula hyemalis

Adult male (above) and female (below).

Photograph by Akira Nomura©



45. Common Goldeneye

Bucephala clangula

Breeding adult male (above) and female (below).

Photograph by Yasuo Watanabe©



46. Smew

Mergellus albellus

Adult male (above) and female (below).

Photograph by S.Gombobaatar©

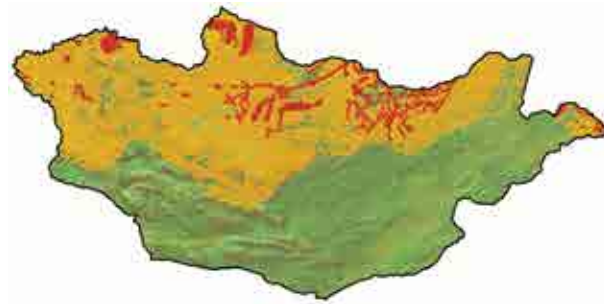


47. Red-breasted Merganser

Mergus serrator

Adult male (above) and adult female (below).

Photograph by Akira Nomura© and Tom Tams©



48. Common Merganser

Mergus merganser

Breeding adult male (above) and female with chicks (below).

Photograph by Yasuo Watanabe© and S.Gombobaatar©



49. White-headed Duck

Oxyura leucocephala

Breeding adult males (left) and adult female (right).

Photograph by Sh.Boldbaatar©



50. Red-throated Loon

Gavia stellata

Adult in Russia.

Photograph by A.Andreev©

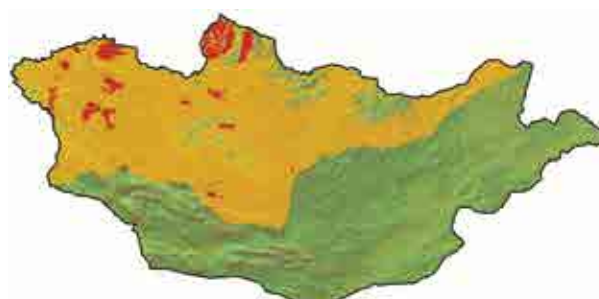


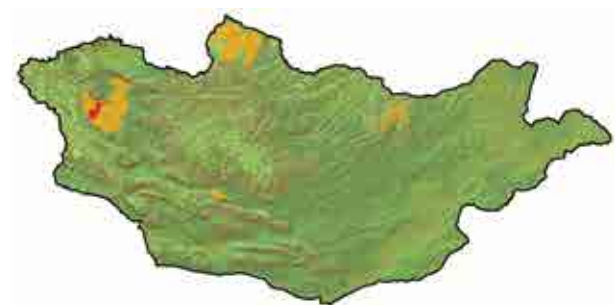
51. Arctic Loon

Gavia arctica

Breeding adult in Russia.

Photograph by V.Kurechmar©





52. Little Grebe

Podiceps ruficollis

Breeding adult.

Photograph by S.Gombobaatar©

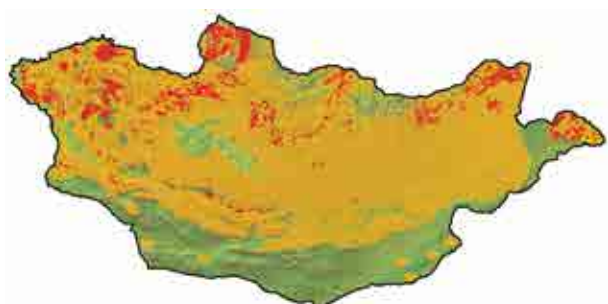


53. Red-necked Grebe

Podiceps grisegena

Adult in Russia.

Photograph by T.Ikeuchi©

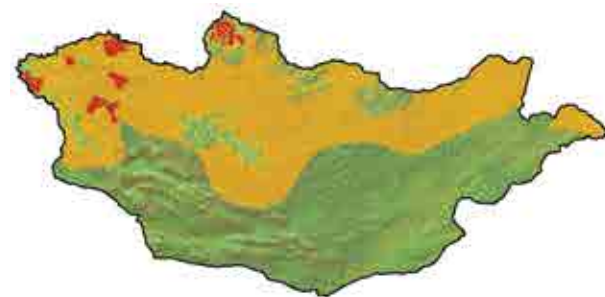


54. Great Crested Grebe

Podiceps cristatus

Breeding adult.

Photograph by S.Gombobaatar©



55. Horned Grebe

Podiceps auritus

Breeding adult male and female with chicks.

Photograph by S.Gombobaatar©



56. Black-necked Grebe

Podiceps nigricollis

Breeding adult.

Photograph by S.Gombobaatar©

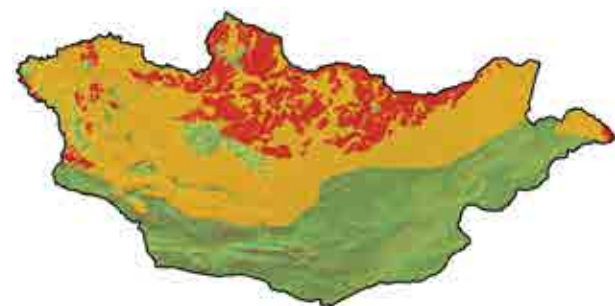


57. Greater Flamingo

Phoenicopterus roseus

Adults in Israel.

Photograph by S.Gombobaatar©



58. Black Stork

Ciconia nigra

Breeding adult.

Photograph by S.Gombobaatar©



59. Oriental Stork

Ciconia boyciana

Adult in Japan.

Photograph by S.Gombobaatar©



60. Black-headed Ibis

Threskiornis melanocephalus

Adult in India.

Photograph by Jugal Tiwari©

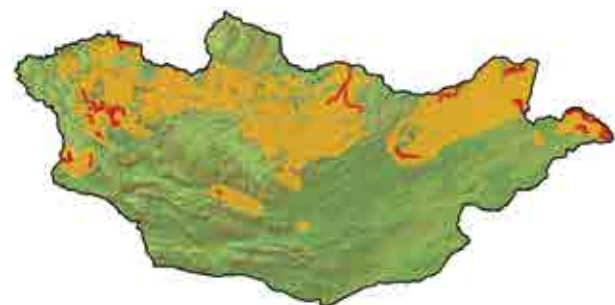


61. Eurasian Spoonbill

Platalea leucorodia

Adult (left) and immature (right).

Photograph by S.Gombobaatar©



62. Great Bittern

Botaurus stellaris

Breeding adult.

Photograph by T.Batbaatar©



63. Little Bittern

Ixobrychus minutus

Non-breeding immature in Israel.

Photograph by S.Gombobaatar©



64. Schrenck's Bittern
Ixobrychus eurhythmus
Adult male in Singapore.

Photograph by Yeo Swee Cheong©



65. Black-crowned Night-heron
Nycticorax nycticorax
Adult in Japan.

Photograph by S.Gombobaatar©



66. Striated Heron
Butorides striatus
Adult in Japan.

Photograph by S.Gombobaatar©



67. Chinese Pond-heron

Ardeola bacchus

Adult in summer plumage.

Photograph by S.Gombobaatar©

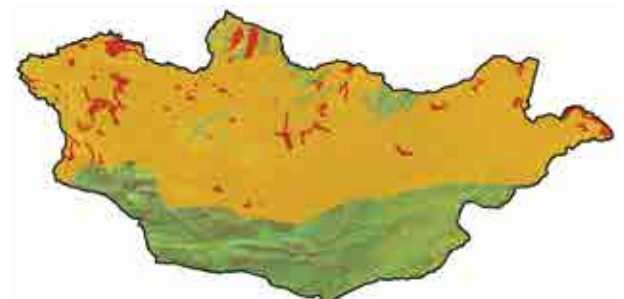


68. Cattle Egret

Bubulcus ibis

Adult in winter plumage.

Photograph by S.Gombobaatar©



69. Grey Heron

Ardea cinerea

Breeding adult.

Photograph by S.Gombobaatar©



70. Purple Heron

Ardea purpurea

Breeding adult.

Photograph by S.Gombobaatar©



71. Great Egret

Egretta alba

Adult in winter plumage.

Photograph by S.Gombobaatar©



72. Little Egret

Egretta garzetta

Adult in breeding plumage in Japan.

Photograph by S.Gombobaatar©

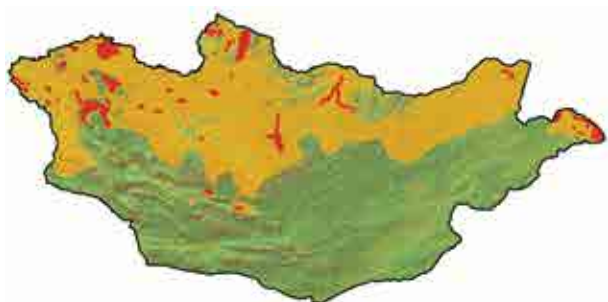


73. Dalmatian Pelican

Pelecanus crispus

Immatures.

Photograph by Kh.Tumendelger©

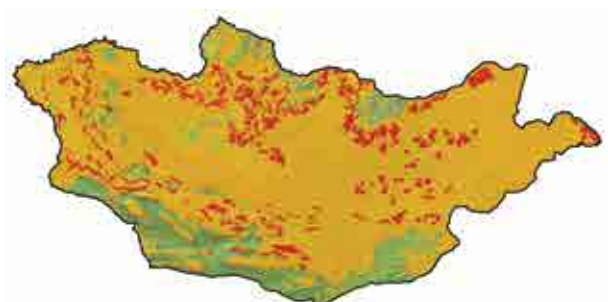


74. Great Cormorant

Phalacrocorax carbo

Breeding adult.

Photograph by S.Gombobaatar©

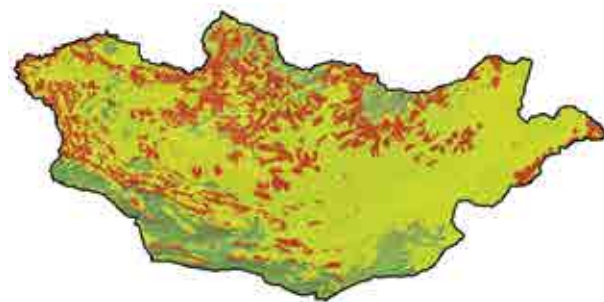


75. Lesser Kestrel

Falco naumanni

Breeding adult male (right) and adult female (left).

Photograph by S.Gombobaatar©



76. Common Kestrel

Falco tinnunculus

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©

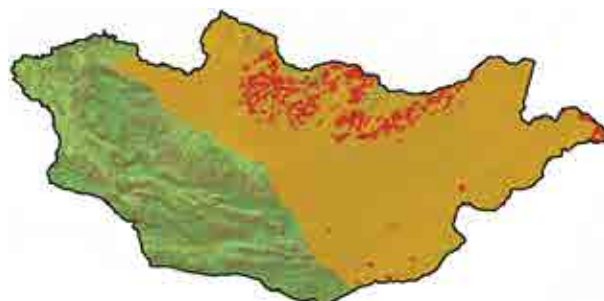


77. Red-footed Falcon

Falco vespertinus

Second year male (above) and adult female (below) in Hungary.

Photograph by Jari Peltomaki©

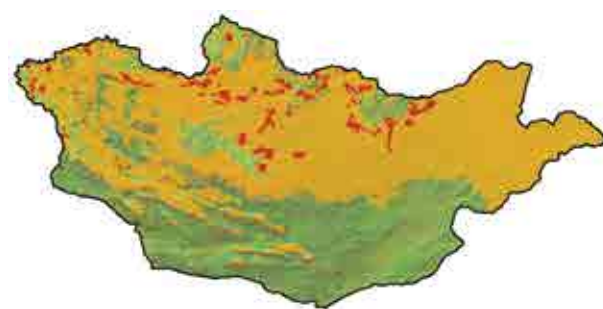


78. Amur Falcon

Falco amurensis

Breeding adult male (right) and adult female (left).

Photograph by S.Gombobaatar©

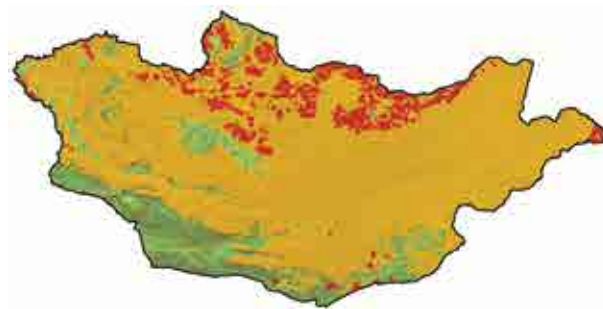


79. Merlin

Falco columbarius

First winter.

Photograph by S.Gombobaatar©

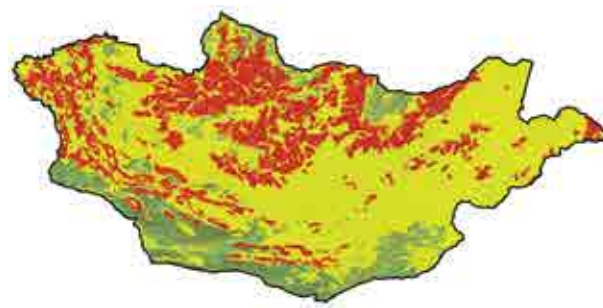


80. Eurasian Hobby

Falco subbuteo

Breeding adult.

Photograph by S.Gombobaatar©



81. Saker Falcon

Falco cherrug

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



82. Gyr Falcon
Adult in Russia

Falco rusticolus

Photograph by Eugene Potapov©



83. Peregrine Falcon
Adult.

Falco peregrinus

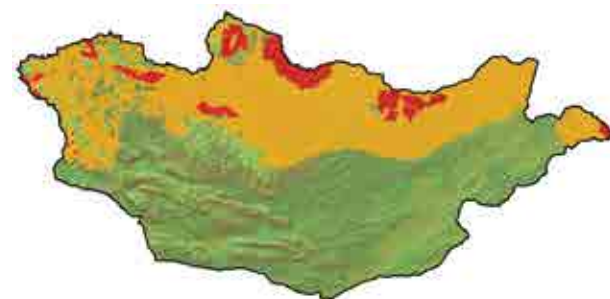
Photograph by S.Gombobaatar©



84. Barbary Falcon
Adult in Kazakhstan.

Falco pelegrinoides

Photograph by Askar Isabekov©



85. Osprey
Adult.

Pandion haliaetus

Photograph by S.Gombobaatar©



86. European Honey-buzzard
Adult male in Israel.

Pernis apivorus

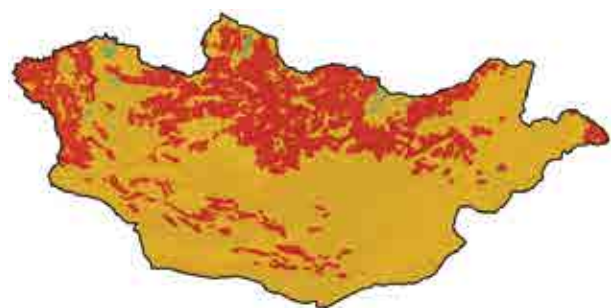
Photograph by S.Gombobaatar©



87. Oriental Honey-buzzard
Adult male in India.

Pernis ptilorhyncus

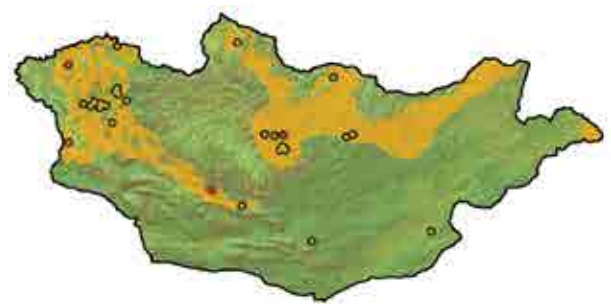
Photograph by Manoj Sharma©



88. Black Kite
Breeding adult.

Milvus migrans

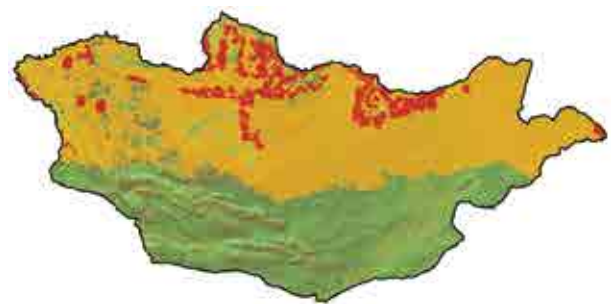
Photograph by S.Gombobaatar©



89. Pallas's Fish-eagle
Breeding adult male.

Haliaeetus leucoryphus

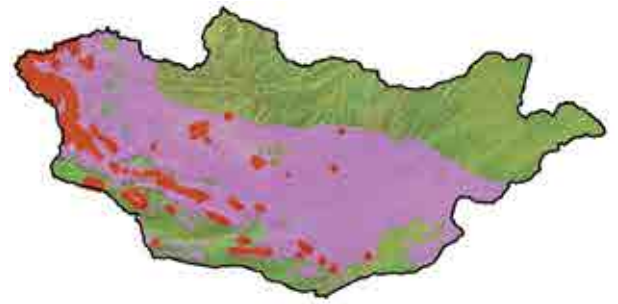
Photograph by S.Gombobaatar©



90. White-tailed Eagle
Breeding adult female.

Haliaeetus albicilla

Photograph by S.Gombobaatar©



91. Lammergeier

Gypaetus barbatus

Adult.

Photograph by S.Gombobaatar©



92. Egyptian Vulture

Neophron percnopterus

Adult in India.

Photograph by Rajneesh Suvarna©



93. Himalayan Vulture

Gyps himalayensis

Immature.

Photograph by B.Gantulga©

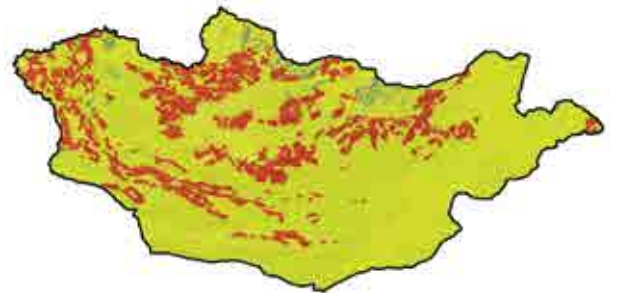


94. Griffon Vulture

Gyps fulvus

Adult male and female in Israel.

Photograph by S.Gombobaatar©



95. Cinereous Vulture

Aegypius monachus

Breeding adult.

Photograph by S.Gombobaatar©



96. Short-toed Snake-eagle

Circaetus gallicus

Adult in India.

Photograph by Nitin Srinivasamurthy©



97. Western Marsh-harrier

Circus aeruginosus

Adult male (left) and juvenile (right) in India.

Photograph by Nitin Srinivasamurthy© and Rishad Naoroji©



98. Eastern Marsh-harrier

Circus spilonotus

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



99. Northern Harrier

Circus cyaneus

Breeding adult male (left) and female (right).

Photograph by S.Gombobaatar© and Igor Fefelov©



100. Pallid Harrier

Circus macrourus

Adult male (left) and adult female (right) in India.

Photograph by Nitin Srinivasamurthy©



101. Pied Harrier

Circus melanoleucos

Adult male in India.

Photograph by Nitin Srinivasamurthy©



102. Montagu's Harrier

Circus pygargus

Adult male (left) and adult female (right) in India.

Photograph by Nitin Srinivasamurthy© and Rishad Naoroji© (flight shots)

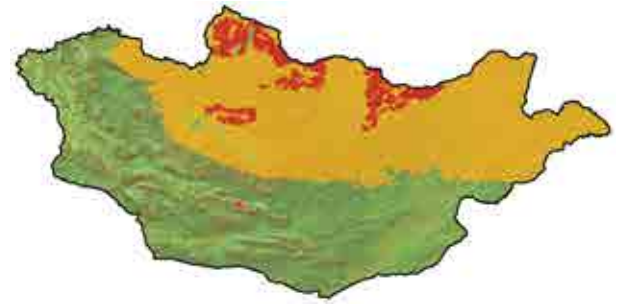


103. Shikra

Accipiter badius

Adult female in India.

Photograph by Nitin Srinivasamurthy©

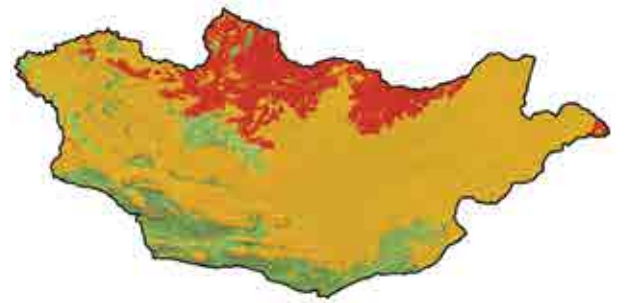


104. Japanese Sparrowhawk

Accipiter gularis

Adult male in Japan.

Photograph by S.Gombobaatar©

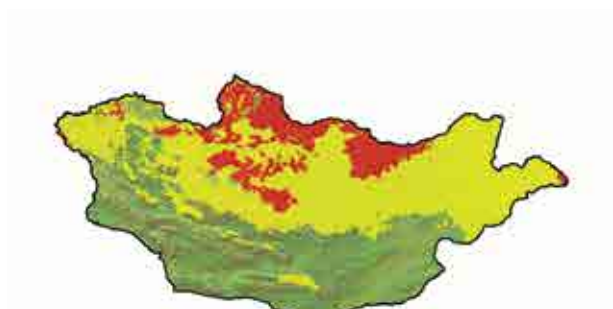


105. Eurasian Sparrowhawk

Accipiter nisus

Breeding adult male (left) and adult female (right).

Photograph by D.Usukhjargal© and S.Gombobaatar©



106. Northern Goshawk

Accipiter gentilis

Breeding adult male (right) and adult female (left).

Photograph by S.Gombobaatar©

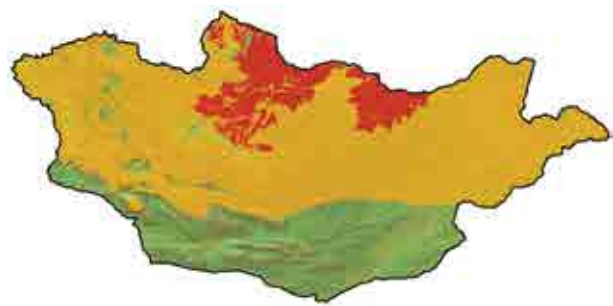


107. Grey-faced Buzzard

Butastur indicus

Adult in Malaysia.

Photograph by Lim Kim Chye©

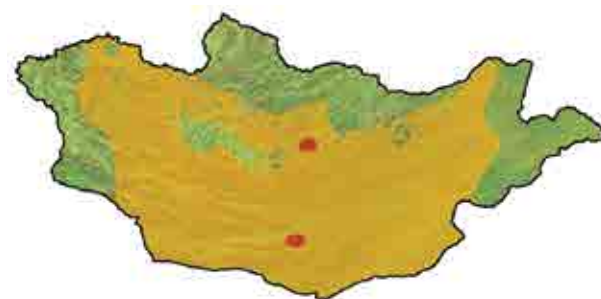


108. Common Buzzard

Buteo buteo

Immature.

Photograph by S.Gombobaatar©

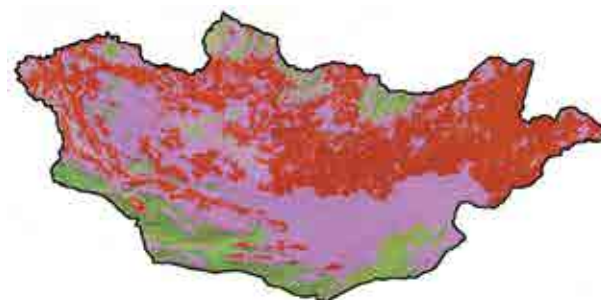


109. Long-legged Buzzard

Buteo rufinus

Immature.

Photograph by S.Gombobaatar©



110. Upland Buzzard

Buteo hemilasius

Breeding adult female with chicks.

Photograph by S.Gombobaatar©



111. Rough-legged Buzzard

Buteo lagopus

Adult in Japan.

Photograph by Toshiyuki Matsumura©

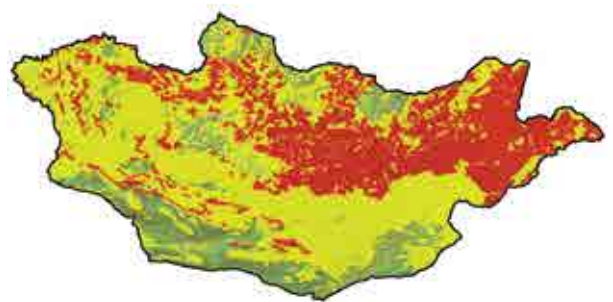


112. Greater Spotted Eagle

Aquila clanga

Juvenile in India.

Photograph by Rishad Naoroji©

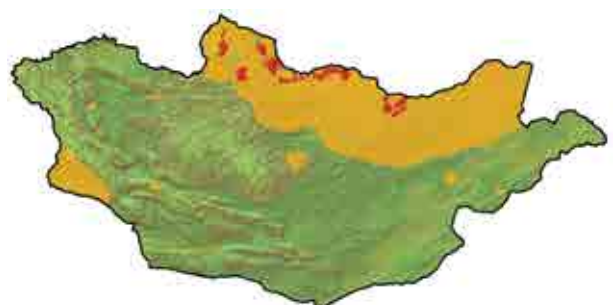


113. Steppe Eagle

Aquila nipalensis

Breeding adult female.

Photograph by S.Gombobaatar©

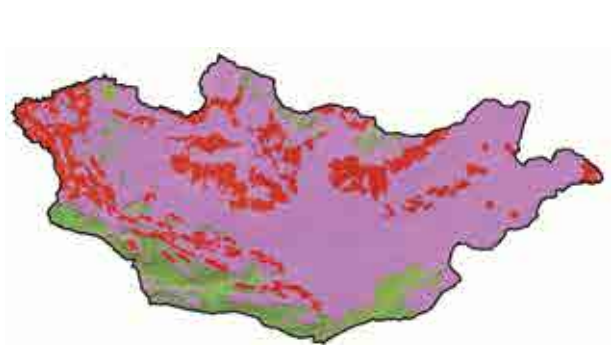


114. Eastern Imperial Eagle

Aquila heliaca

Adult in China.

Photograph by Jonathan Martinez©



115. Golden Eagle

Aquila chrysaetos

Breeding adult female.

Photograph by B.Gantulga©

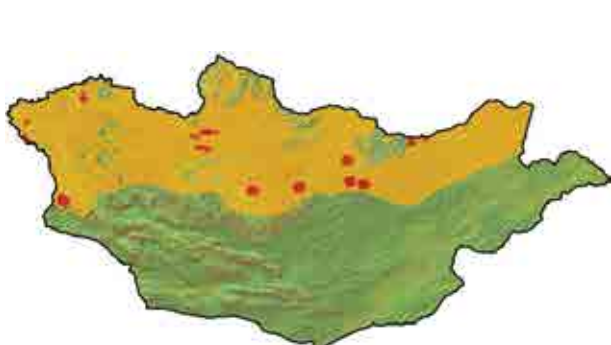


116. Bonelli's Eagle

Hieraetus fasciatus

Adult female with chick in India.

Photograph by Rishad Naoroji©



117. Booted Eagle

Hieraetus pennatus

Adult pale morph (above) and dark morph (below).

Photograph by Rishad Naoroji© and S.Gombobaatar©



118. Mountain Hawk-eagle
Adult female in Japan. *Nisaetus nipalensis*

Photograph by Toshiyuki Matsumura©



119. Great Bustard
Breeding adult female. *Otis tarda*

Photograph by S.Gombobaatar©



120. Houbara Bustard
Breeding adult male. *Chlamydotis undulata*

Photograph by N.Batsaikhan©



121. Swinhoe's Rail
Adult in South Korea

Coturnicops exquisitus

Photograph by Kim Sung Hyun©



122. Water Rail
Adult.

Rallus aquaticus

Photograph by Tom Tams©



123. Corn Crake
Adult in Israel.

Crex crex

Photograph by S.Gombobaatar©



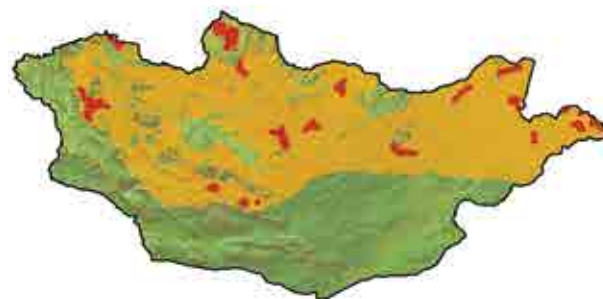
124. White-breasted Waterhen
Amaurornis phoenicurus
Adult in India.

Photograph by Nitin Srinivasamurthy©



125. Little Crake
Porzana parva
Adult.

Photograph by Luigi Sebastiani©



126. Baillon's Crake
Porzana pusilla
Breeding adult.

Photograph by S.Gombobaatar©



127. Spotted Crake

Porzana porzana

Adult.

Photograph by Guy Shorrock©

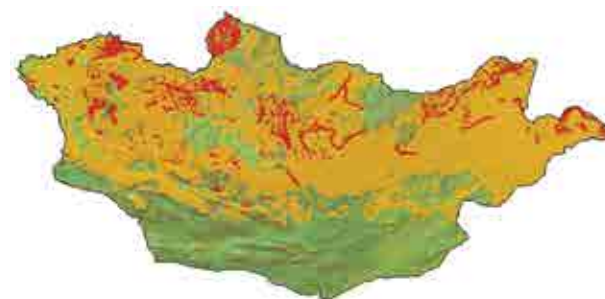


128. Common Moorhen

Gallinula chloropus

Adult.

Photograph by S.Gombobaatar©



129. Common Coot

Fulica atra

Adult.

Photograph by S.Gombobaatar©



130. Siberian Crane

Grus leucogeranus

Adult and immatures.

Photograph by Frank Weihe©

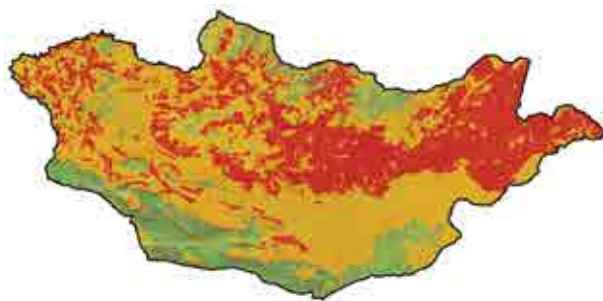


131. White-naped Crane

Grus vipio

Breeding adult male and female.

Photograph by S.Gombobaatar©

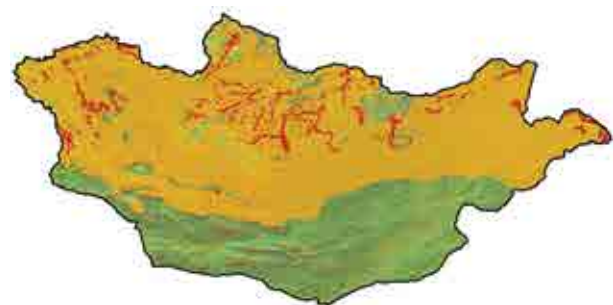


132. Demoiselle Crane

Anthropoides virgo

Breeding adult male and female with chicks.

Photograph by S.Gombobaatar©

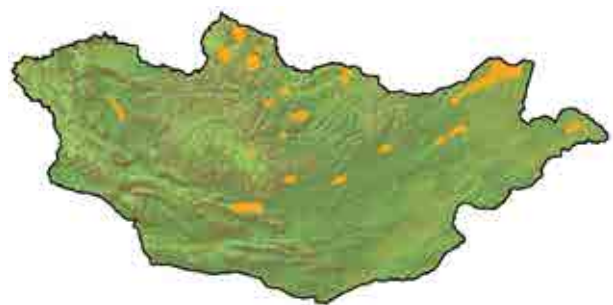


133. Common Crane

Grus grus

Breeding adult.

Photograph by S.Gombobaatar©



134. Hooded Crane

Grus monacha

Adults in Japan.

Photograph by S.Gombobaatar©



135. Red-crowned Crane

Grus japonensis

Adult in Japan.

Photograph by S.Gombobaatar©



136. Yellow-legged Buttonquail

Turnix tanki

Adult in India.

Photograph by Nitin Srinivasamurthy©

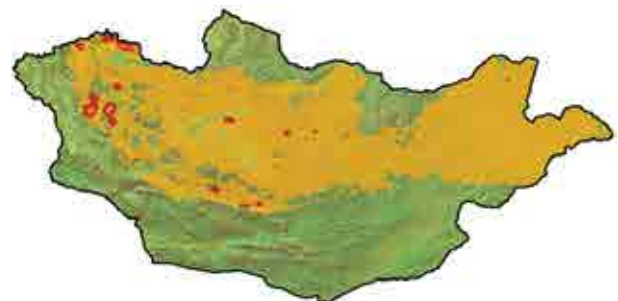


137. Eurasian Thick-knee

Burhinus oedicnemus

Adult in Kazakhstan.

Photograph by Askar Isabekov©

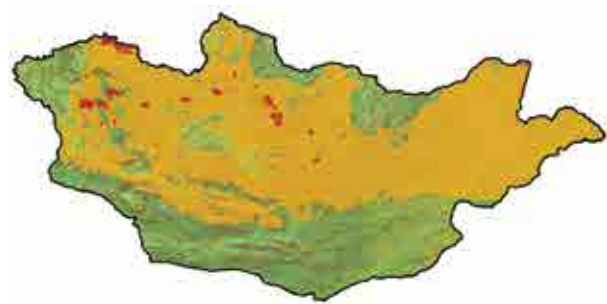


138. Black-winged Stilt

Himantopus himantopus

Breeding adult.

Photograph by S.Gombobaatar©

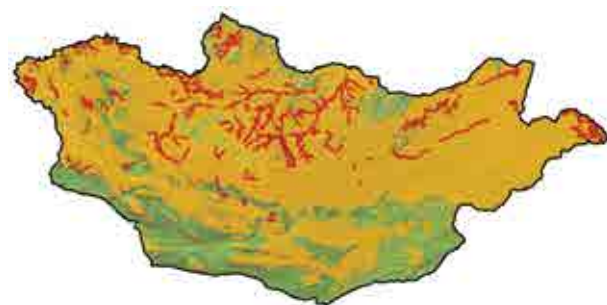


139. Pied Avocet

Recurvirostra avosetta

Breeding adult.

Photograph by S.Gombobaatar©



140. Northern Lapwing

Vanellus vanellus

Breeding adult male.

Photograph by S.Gombobaatar©



141. Grey-headed Lapwing

Vanellus cinereus

Adult in Japan.

Photograph by S.Gombobaatar©



142. Sociable Lapwing

Vanellus gregarius

Breeding adult in India.

Photograph by Jugal Tiwari©



143. Pacific Golden Plover

Pluvialis fulva

Adults.

Photograph by S.Gombobaatar©



144. Grey Plover

Pluvialis squatarola

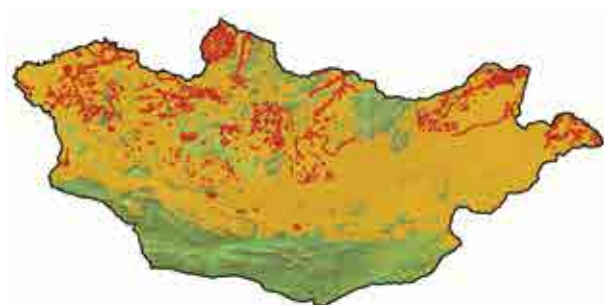
Adult in Russia.

Photograph by T.Ikeuchi©



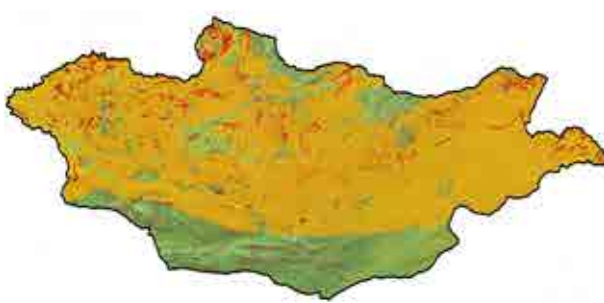
145. Common Ringed Plover
Charadrius hiaticula
Adult.

Photograph by S.Gombobaatar©



146. Little Ringed Plover
Charadrius dubius
Breeding adult.

Photograph by S.Gombobaatar©



147. Kentish Plover
Charadrius alexandrinus
Breeding adult.

Photograph by S.Gombobaatar©

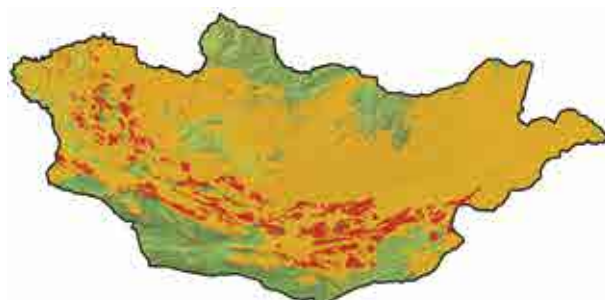


148. Lesser Sand Plover

Charadrius mongolus

Adult.

Photograph by Martin Hale©

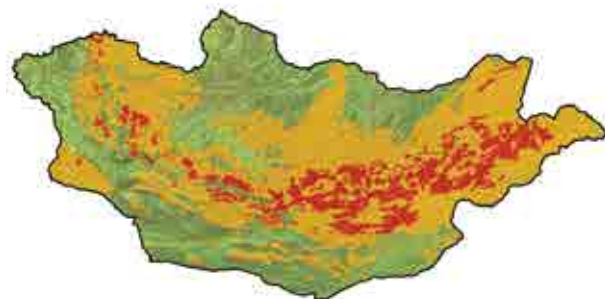


149. Greater Sand Plover

Charadrius leschenaultii

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©

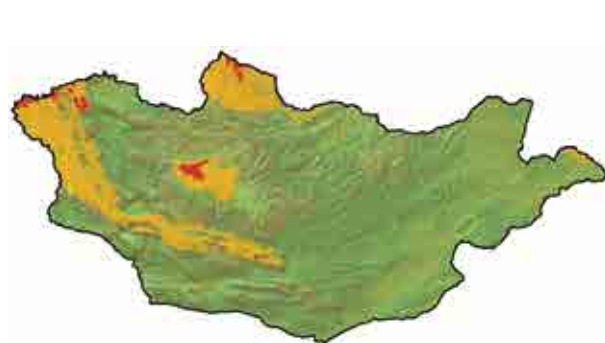


150. Oriental Plover

Charadrius veredus

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©



151. Eurasian Dotterel
Eudromias morinellus
Breeding adult in Russia.

Photograph by Y.Artukhin©



152. Greater Painted-snipe
Rostratula benghalensis
Adult male (right) and adult female (left) in
Japan.

Photograph by Akira Nomura©



153. Eurasian Woodcock
Scolopax rusticola
Adult in Japan.

Photograph by Akira Nomura©

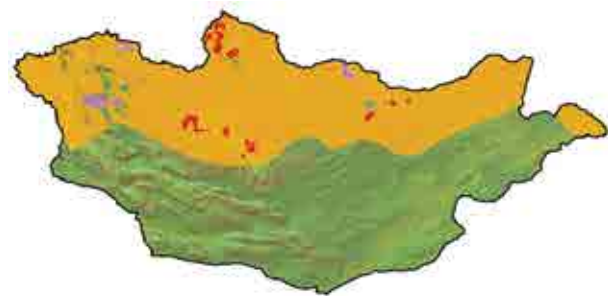


154. Jack Snipe

Lymnocyptes minimus

Adult.

Photograph by Tom Tams©

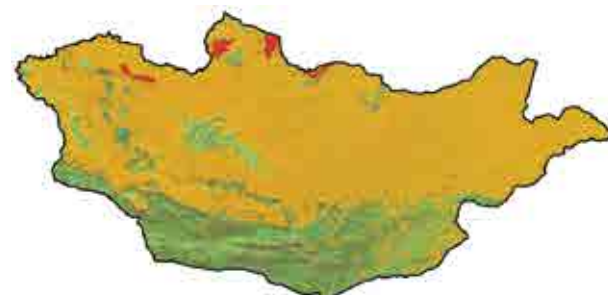


155. Solitary Snipe

Gallinago solitaria

Adult.

Photograph by Chang-Yong CHOI©



156. Pintail Snipe

Gallinago stenura

Adult.

Photograph by Rajneesh Suvarna©

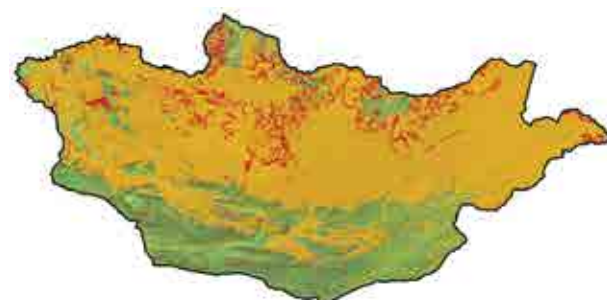


157. Swinhoe's Snipe

Gallinago megala

Adult.

Photograph by Chang-Yong CHOI©



158. Common Snipe

Gallinago gallinago

Adult.

Photograph by S.Gombobaatar©



159. Long-billed Dowitcher

Limnodromus scolopaceus

Non-breeding immature.

Photograph by Tom Tams©



160. Asian Dowitcher
Limnodromus semipalmatus
Breeding adult.

Photograph by S.Gombobaatar©



161. Black-tailed Godwit
Limosa limosa
Breeding adult.

Photograph by S.Gombobaatar©



162. Bar-tailed Godwit
Limosa lapponica
Adult in South Korea.

Photograph by Chang-Yong CHOI©



163. Little Curlew

Numenius minutus

Adult.

Photograph by S.Gombobaatar©



164. Whimbrel

Numenius phaeopus

Immature in Japan.

Photograph by Hiromi Konishi©



165. Eurasian Curlew

Numenius arquata

Breeding adult.

Photograph by S.Gombobaatar©



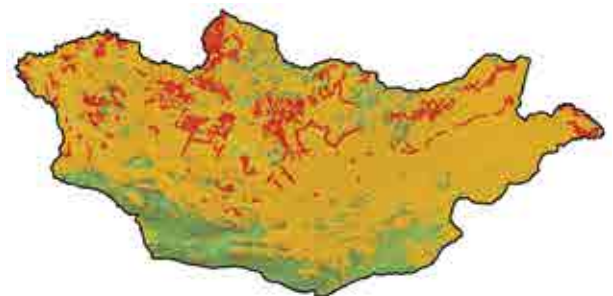
166. Far Eastern Curlew
Numenius madagascariensis
Adult.

Photograph by Richard Reading©



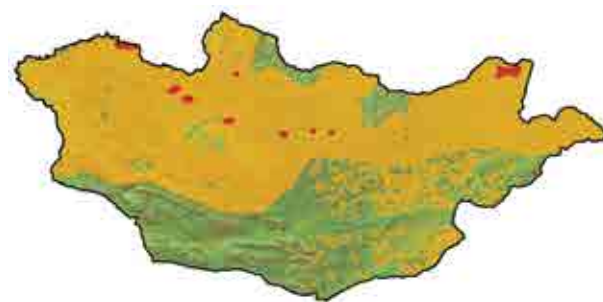
167. Spotted Redshank
Tringa erythropus
Adult from breeding to non-breeding plumage.

Photograph by S.Gombobaatar©



168. Common Redshank
Tringa totanus
Breeding adult.

Photograph by S.Gombobaatar©



169. Marsh Sandpiper

Tringa stagnatilis

Breeding adult.

Photograph by S.Gombobaatar©

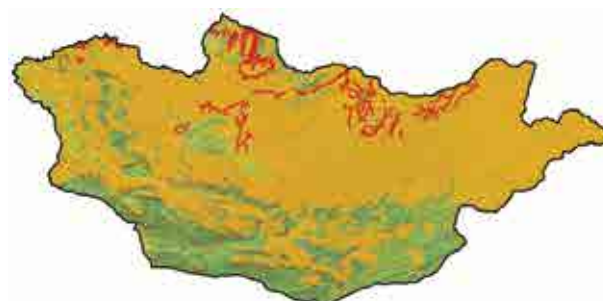


170. Common Greenshank

Tringa nebularia

Adult.

Photograph by S.Gombobaatar©

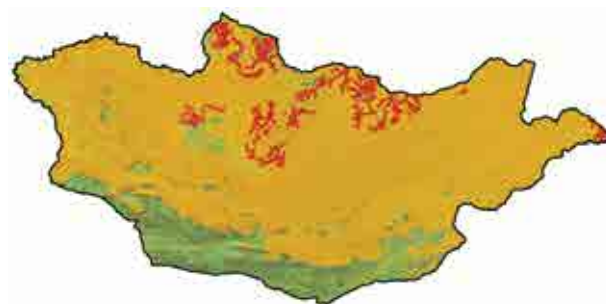


171. Green Sandpiper

Tringa ochropus

Breeding adult.

Photograph by S.Gombobaatar©



172. Wood Sandpiper

Tringa glareola

Breeding adult.

Photograph by S.Gombobaatar©

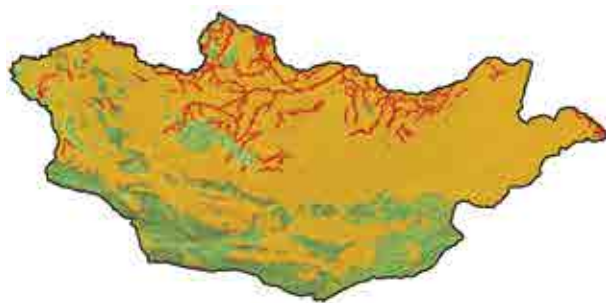


173. Terek Sandpiper

Xenus cinereus

Adult.

Photograph by S.Gombobaatar©



174. Common Sandpiper

Actitis hypoleucos

Breeding adult.

Photograph by S.Gombobaatar©



175. Grey-tailed Tattler

Heteroscelus brevipes

Adult in South Korea.

Photograph by Inki Kwon©



176. Wandering Tattler

Heteroscelus incanus

Adult in Japan.

Photograph by Akira Nomura©



177. Ruddy Turnstone

Arenaria interpres

Adult in breeding plumage (left) and non-breeding plumage (right).

Photograph by S.Gombobaatar©



178. Red Knot

Calidris canutus

Breeding adult in Russia.

Photograph by Igor Fefelov©



179. Sanderling

Calidris alba

Adult from breeding to non-breeding plumage in South Korea.

Photograph by Young Min Moon©



180. Little Stint

Calidris minuta

Adult in breeding plumage.

Photograph by S.Gombobaatar©



181. Red-necked Stint

Calidris ruficollis

Adult in breeding plumage.

Photograph by S.Gombobaatar©



182. Temminck's Stint

Calidris temminckii

Adult in breeding plumage.

Photograph by S.Gombobaatar©

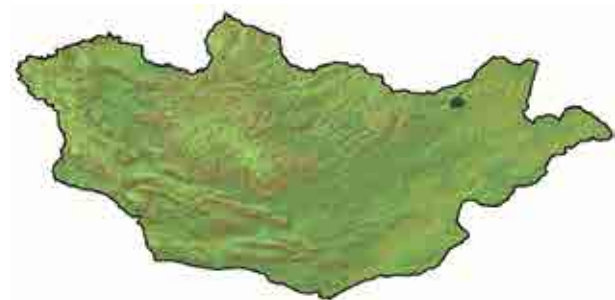


183. Long-toed Stint

Calidris subminuta

Adult in breeding plumage.

Photograph by S.Gombobaatar©



184. Pectoral Sandpiper

Calidris melanotos

Adult in Japan.

Photograph by Akira Nomura©



185. Sharp-tailed Sandpiper

Calidris acuminata

Adult in breeding plumage.

Photograph by S.Gombobaatar©



186. Dunlin

Calidris alpina

Adult in breeding plumage.

Photograph by S.Gombobaatar©



187. Curlew Sandpiper

Calidris ferruginea

Adult in breeding plumage.

Photograph by S.Gombobaatar©



188. Broad-billed Sandpiper

Limicola falcinellus

Adult in breeding plumage.

Photograph by S.Gombobaatar©



189. Ruff

Philomachus pugnax

Adult in non-breeding plumage.

Photograph by S.Gombobaatar©



190. Red-necked Phalarope *Phalaropus lobatus*
Adult in breeding plumage.

Photograph by S.Gombobaatar©



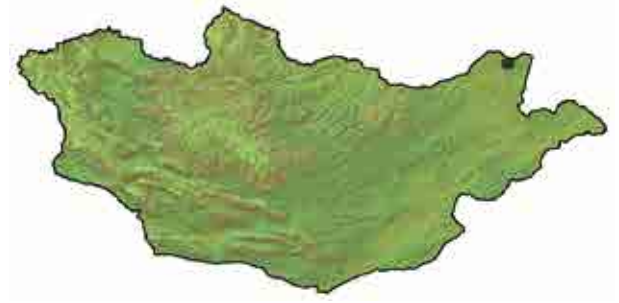
191. Red Phalarope *Phalaropus fulicarius*
Adult in breeding plumage.

Photograph by Frank Weihe©



192. Oriental Pratincole *Glareola maldivarum*
Adult in South Korea.

Photograph by Hyun-Young NAM©



193. Black-tailed Gull

Larus crassirostris

Adult in Japan.

Photograph by S.Gombobaatar© and
T.Ikeuchi©

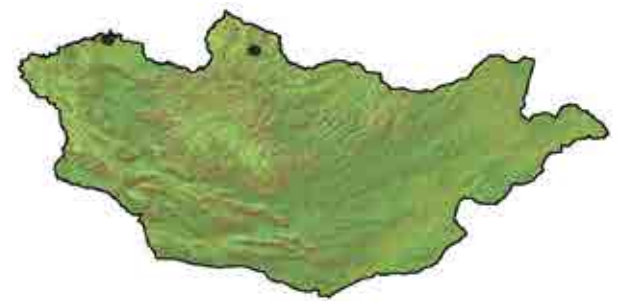


194. Mew Gull

Larus canus

Adult in South Korea.

Photograph by Chang-Yong CHOI©

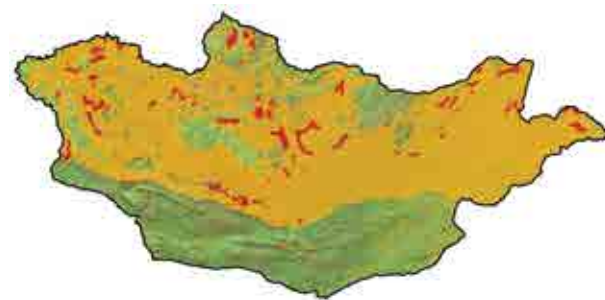


195. Glaucous Gull

Larus hyperboreus

Adult in South Korea.

Photograph by Chang-Yong CHOI©



196. Mongolian Gull

Larus mongolicus

Breeding adult.

Photograph by S.Gombobaatar©



197. Pallas's Gull

Larus ichthyaetus

Breeding adults.

Photograph by S.Gombobaatar©

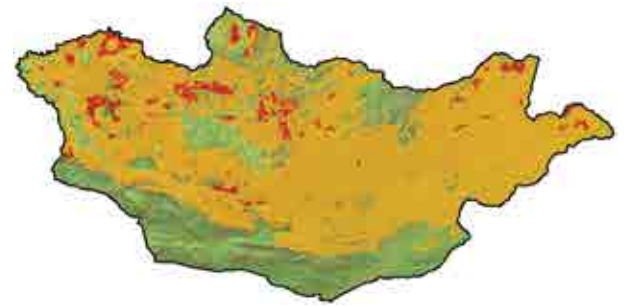


198. Brown-headed Gull

Larus brunnicephalus

Adult in non-breeding plumage.

Photograph by Nitin Srinivasamurthy©



199. Black-headed Gull

Larus ridibundus

Breeding adult.

Photograph by S.Gombobaatar©

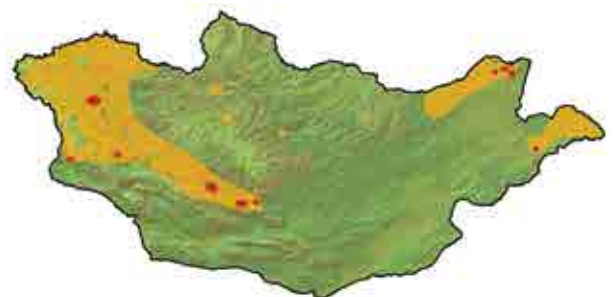


200. Slender-billed Gull

Larus genei

Adult (right) and immature (left) in Israel.

Photograph by S.Gombobaatar©



201. Relict Gull

Larus relictus

Breeding adult.

Photograph by S.Gombobaatar©



202. Little Gull

Larus minutus

Breeding adult in Finland.

Photograph by Jari Peltomaki©



203. Ross's Gull

Rhodostethia rosea

Breeding adult in Russia.

Photograph by T.Ikeuchi©



204. Black-legged Kittiwake

Rissa tridactyla

Adult in non-breeding plumage in Japan.

Photograph by Osao&Michiaki Ujihara©



205. Gull-billed Tern

Sterna nilotica

Adult in non-breeding plumage.

Photograph by S.Gombobaatar©

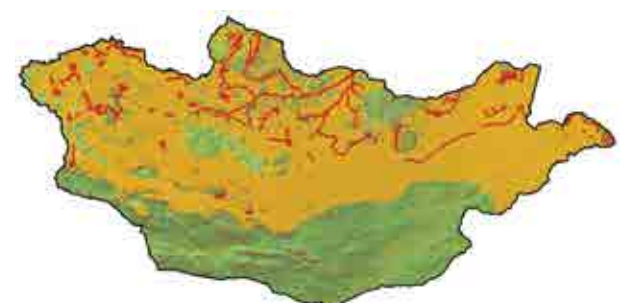


206. Caspian Tern

Sterna caspia

Breeding adult.

Photograph by S.Gombobaatar©



207. Common Tern

Sterna hirundo

Breeding adult.

Photograph by S.Gombobaatar©



208. Arctic Tern

Sterna paradisaea

Adult.

Photograph by Richard Reading©

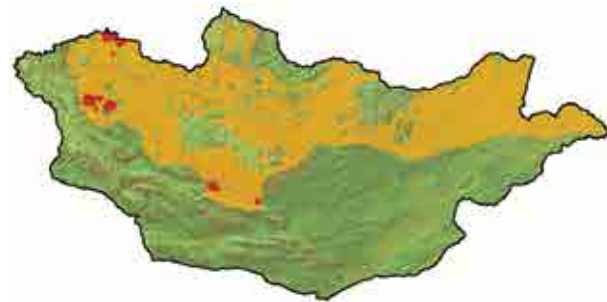


209. Little Tern

Sterna albifrons

Breeding adult.

Photograph by S.Gombobaatar©

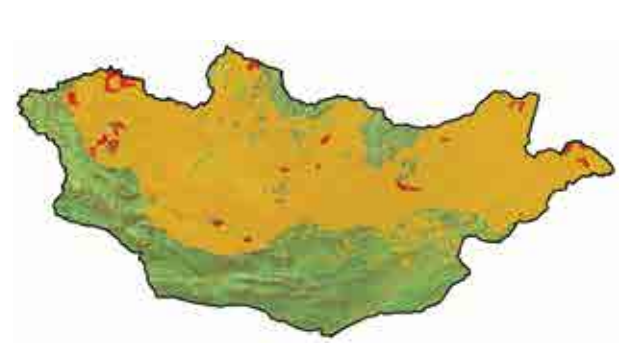


210. Whiskered Tern

Chlidonias hybrida

Breeding adults.

Photograph by S.Gombobaatar©



211. White-winged Tern

Chlidonias leucopterus

Breeding adult.

Photograph by S.Gombobaatar©



212. Black Tern

Chlidonias niger

Breeding adult in Kazakhstan.

Photograph by Askar Isabekov©



213. Pomarine Jaeger

Stercorarius pomarinus

Adult.

Photograph by Tom Tams©



214. Parasitic Jaeger

Stercorarius parasiticus

Adult in Japan.

Photograph by Akira Nomura©



215. Pallas's Sandgrouse

Syrrhaptes paradoxus

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©

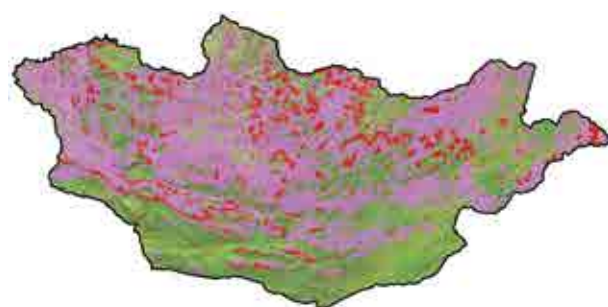


216. Rock Pigeon

Columba livia

Adult (right) and two juveniles (left).

Photograph by S.Gombobaatar©



217. Hill Pigeon

Columba rupestris

Breeding adult.

Photograph by S.Gombobaatar©



218. Stock Dove

Columba oenas

Immatures.

Photograph by S.Gombobaatar©



219. Pale-backed Pigeon

Columba eversmanni

Adult in Kazakhstan.

Photograph by Gennady Dyakin©



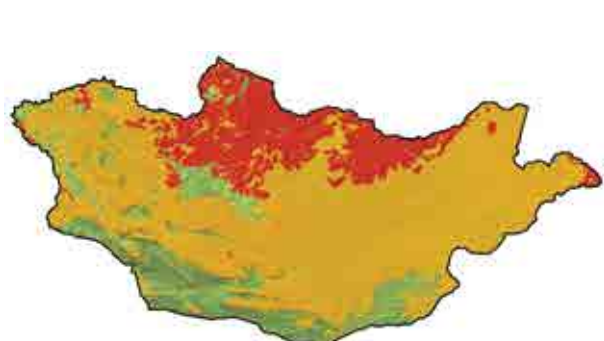
220. Common Wood-pigeon
Columba palumbus
Adult in UK.

Photograph by Barry Boswell©



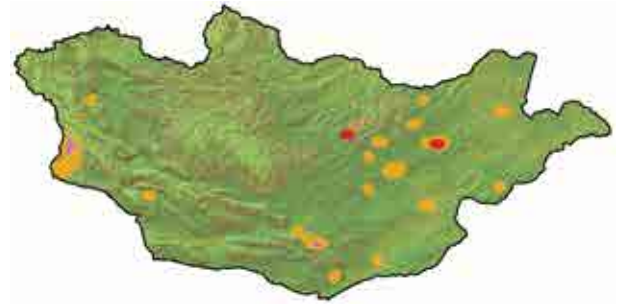
221. European Turtle-dove
Streptopelia turtur
Adult in Kazakhstan.

Photograph by Askar Isabekov©



222. Oriental Turtle-dove
Streptopelia orientalis
Adult

Photograph by S.Gombobaatar©



223. Eurasian Collared-dove
Streptopelia decaocto
Adult

Photograph by S.Gombobaatar©



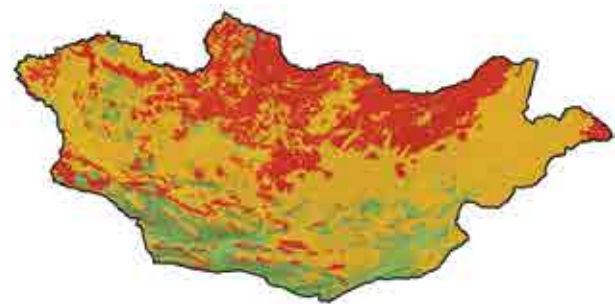
224. Laughing Dove
Streptopelia senegalensis
Adult in Jordan.

Photograph by S.Gombobaatar©



225. Indian Cuckoo
Cuculus micropterus
Adult in India.

Photograph by Vijay Anand Ismavel©

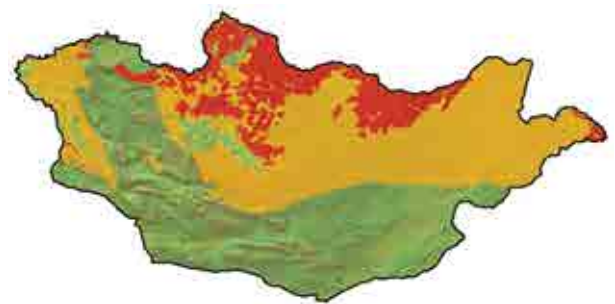


226. Common Cuckoo

Cuculus canorus

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



227. Oriental Cuckoo

Cuculus saturatus

Breeding adult male.

Photograph by S.Gombobaatar©

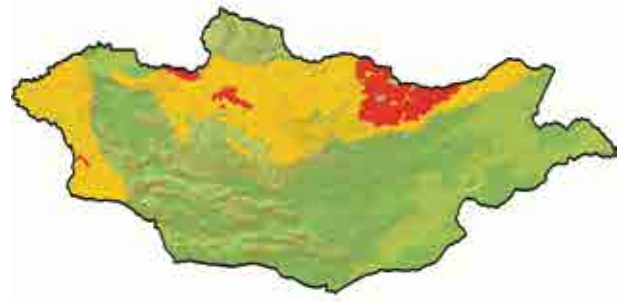


228. Lesser Cuckoo

Cuculus poliocephalus

Adult

Photograph by Akira Nomura©



229. Common Scops-owl

Otus scops

Breeding adult.

Photograph by S.Gombobaatar©



230. Oriental Scops-owl

Otus sunia

Breeding adult in India.

Photograph by Manoj Sharma©

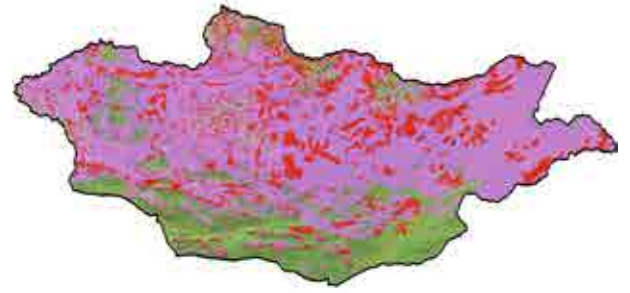


231. Snowy Owl

Nyctea scandiaca

Breeding adult male (left) and adult female (right) in Japan.

Photograph by S.Gombobaatar©

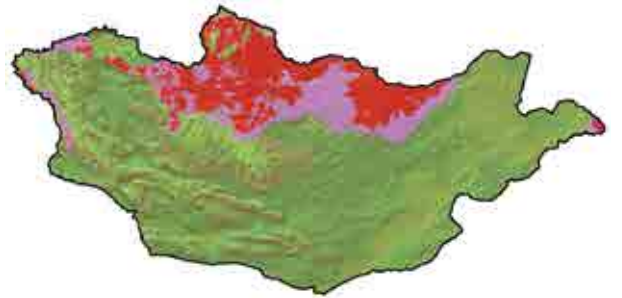


232. Eurasian Eagle-owl

Bubo bubo

Breeding adult

Photograph by S.Gombobaatar©

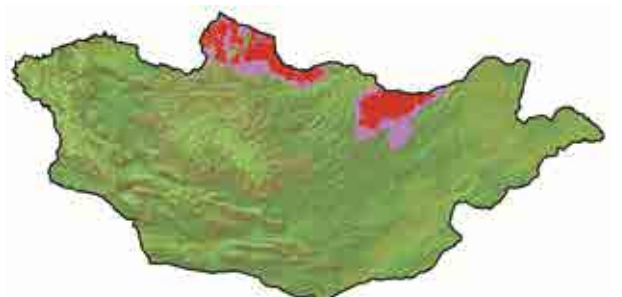


233. Ural Owl

Strix uralensis

Breeding adult

Photograph by D.Suran©

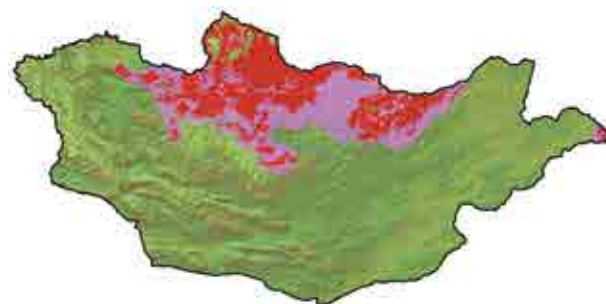


234. Great Grey Owl

Strix nebulosa

Breeding adult in Russia.

Photograph by T.Ikeuchi©

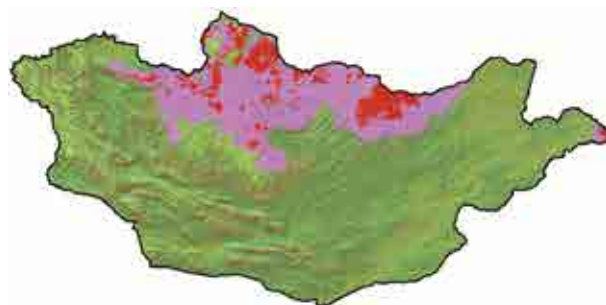


235. Northern Hawk-owl

Surnia ulula

Breeding adult in Russia.

Photograph by T.Ikeuchi©

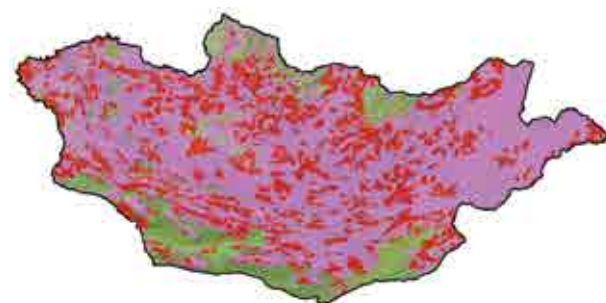


236. Eurasian Pygmy-owl

Glaucidium passerinum

Adult in Finland.

Photograph by Max Vakiala©

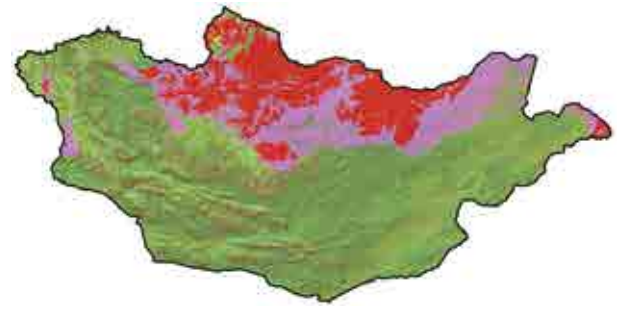


237. Little Owl

Athene noctua

Breeding adult.

Photograph by S.Gombobaatar©

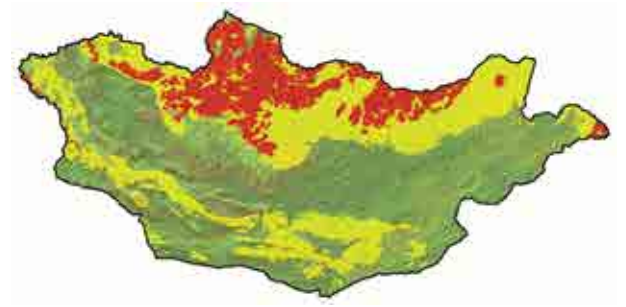


238. Boreal Owl

Aegolius funereus

Breeding adult

Photograph by B.Gantulga©

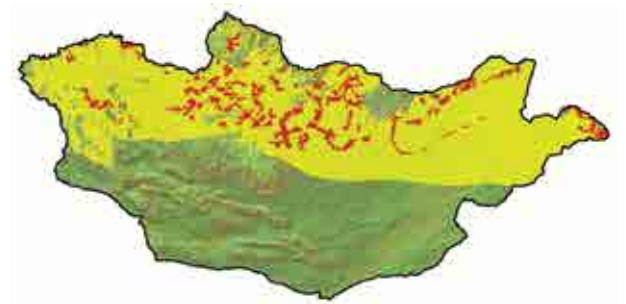


239. Long-eared Owl

Asio otus

Adult

Photograph by S.Gombobaatar©

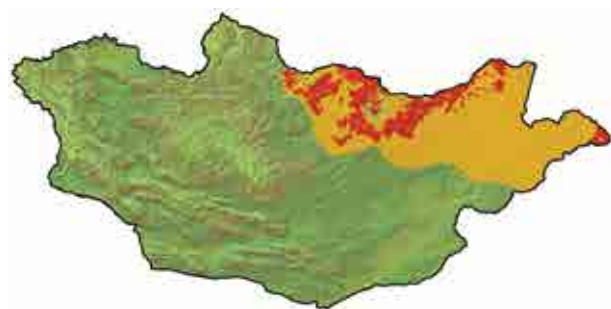


240. Short-eared Owl

Asio flammeus

Adult

Photograph by T.Ikeuchi©

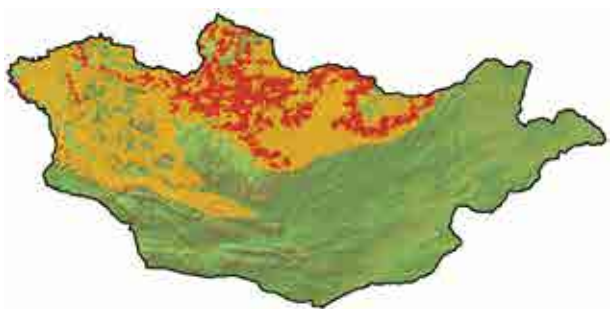


241. Grey Nightjar

Caprimulgus indicus

Adult

Photograph by S.Gombobaatar©



242. Eurasian Nightjar

Caprimulgus europaeus

Adult in Kazakhstan.

Photograph by Askar Isabekov©

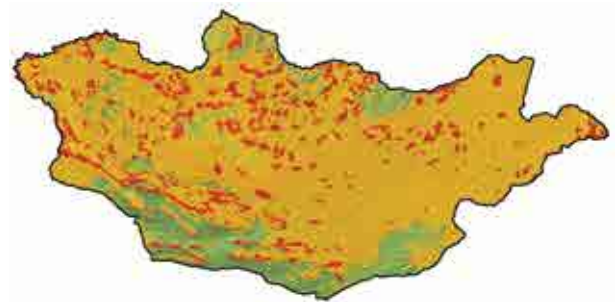


243. White-throated Needletail

Hirundapus caudacutus

Adult in Japan.

Photograph by Akira Nomura©

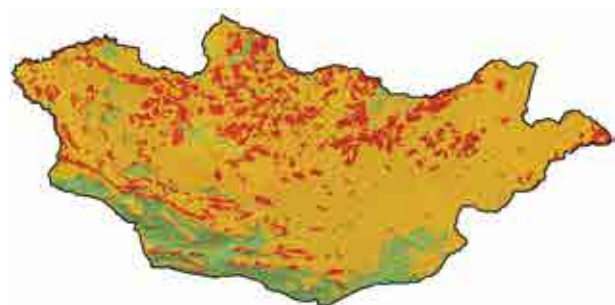


244. Common Swift

Apus apus

Breeding adult

Photograph by S.Gombobaatar©



245. Fork-tailed Swift

Apus pacificus

Breeding adult

Photograph by S.Gombobaatar©



246. Asian Dollarbird

Eurystomus orientalis

Adult in India.

Photograph by Nitin Srinivasamurthy©



247. Black-capped Kingfisher

Halcyon pileata

Adult

Photograph by Tom Tams©



248. Common Kingfisher

Alcedo atthis

Breeding adult female (left) and adult male (right).

Photograph by S.Gombobaatar©

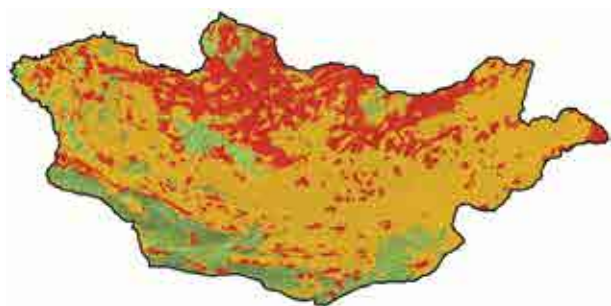


249. European Bee-eater

Merops apiaster

Adult in Jordan.

Photograph by S.Gombobaatar©

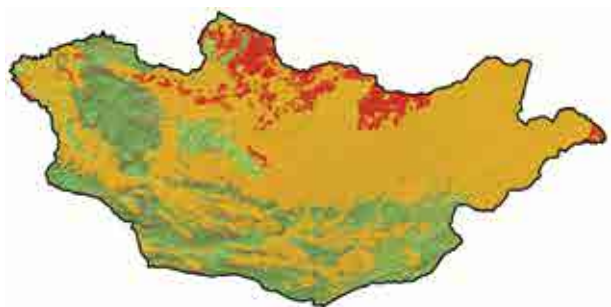


250. Eurasian Hoopoe

Upupa epops

Adult

Photograph by S.Gombobaatar©

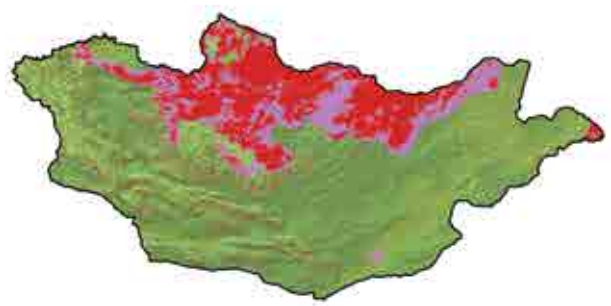


251. Eurasian Wryneck

Jynx torquilla

Adult

Photograph by B.Gantulga©



252. Lesser Spotted Woodpecker

Dendrocopos minor

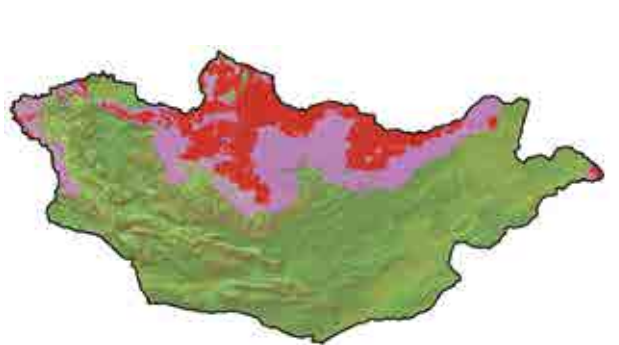
Breeding adult male (left) and female (right).

Photograph by S.Gombobaatar©



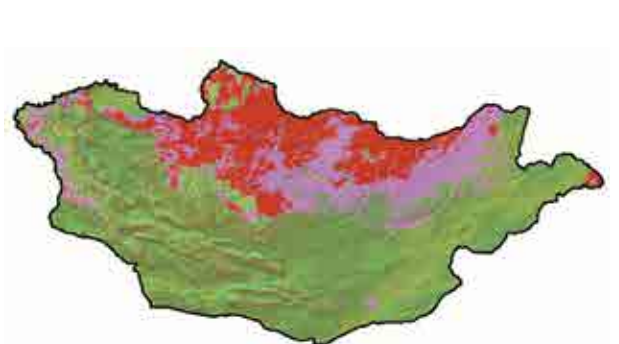
253. Rufous-bellied Woodpecker
Dendrocopos hyperythrus
Adult

Photograph by Richard Reading©



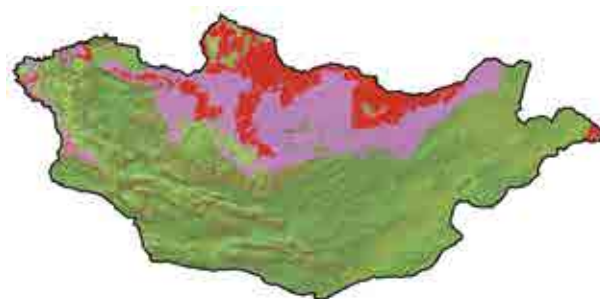
254. White-backed Woodpecker
Dendrocopos leucotos
Breeding adult male (left) and adult female
(right).

Photograph by S.Gombobaatar©



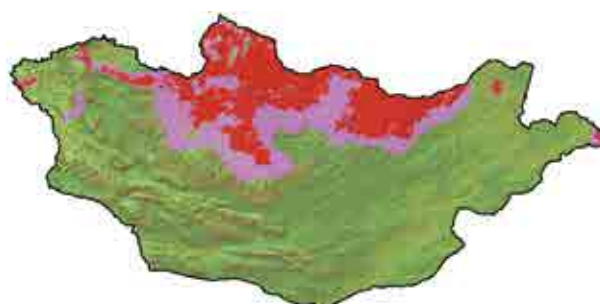
255. Great Spotted Woodpecker
Dendrocopos major
Breeding adult male (left) and adult female
(right).

Photograph by S.Gombobaatar©



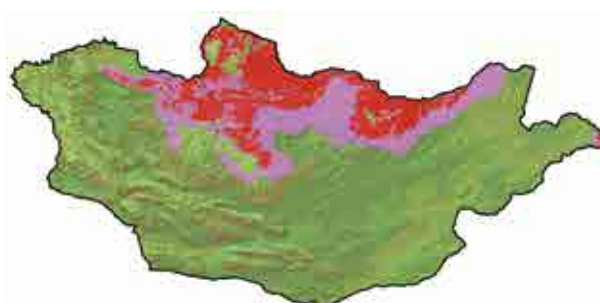
256. Eurasian Three-toed Woodpecker
Picoides tridactylus
 Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



257. Black Woodpecker
Dryocopus martius
 Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



258. Grey-faced Woodpecker
Picus canus
 Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©

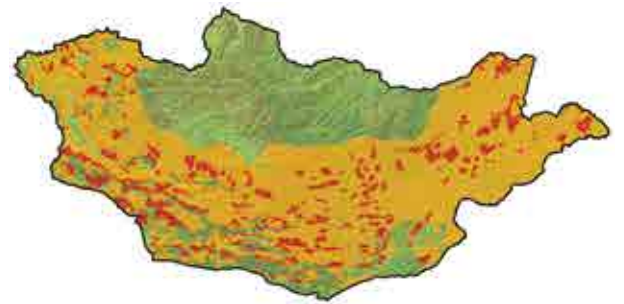


259. Bull-headed Shrike

Lanius bucephalus

Adult male in Japan.

Photograph by S.Gombobaatar©

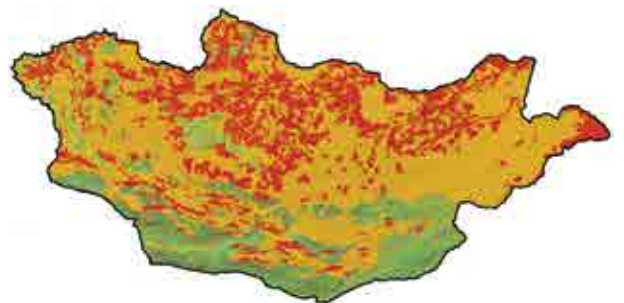


260. Rufous-tailed Shrike

Lanius isabellinus

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



261. Brown Shrike

Lanius cristatus

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



262. Long-tailed Shrike

Lanius schach

Adult male in South Korea.

Photograph by Hyun-Young NAM©

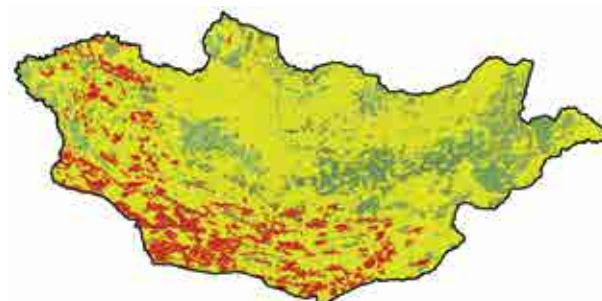


263. Lesser Grey Shrike

Lanius minor

Adult male in Kazakhstan.

Photograph by Askar Isabekov©

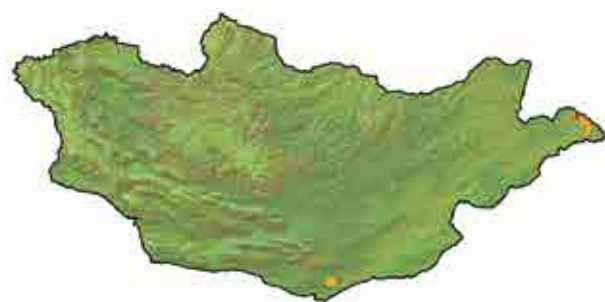


264. Great Grey Shrike

Lanius excubitor

Breeding adult male (right) and adult *pallidirostris* (left).

Photograph by S.Gombobaatar©



265. Chinese Grey Shrike

Lanius sphenocercus

Adult

Photograph by S.Gombobaatar©



266. Eurasian Golden Oriole

Oriolus oriolus

Breeding adult male (left) and female (right).

Photograph by Nitin Srinivasamurthy© and S.Gombobaatar©



267. Black-naped Oriole

Oriolus chinensis

Adult male in Japan.

Photograph by Akira Nomura©

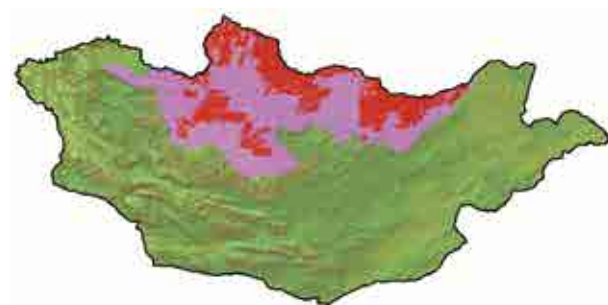


268. Black Drongo

Dicrurus macrocercus

Adult in India.

Photograph by Nitin Srinivasamurthy©

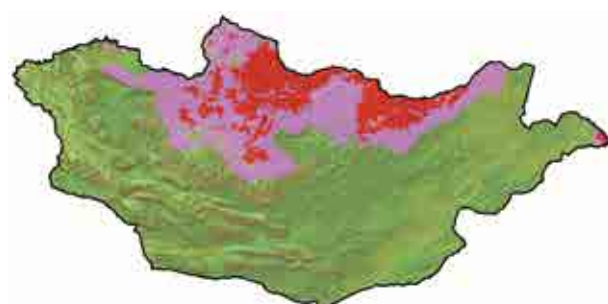


269. Siberian Jay

Perisoreus infaustus

Adult.

Photograph by B.Gantulga©

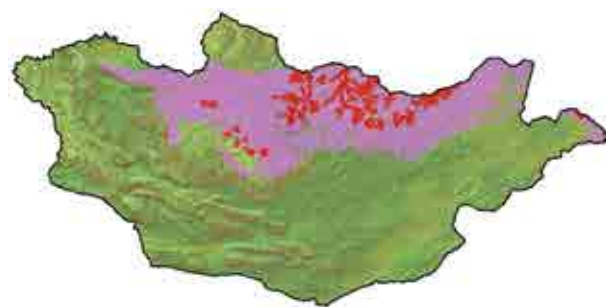


270. Eurasian Jay

Garrulus glandarius

Adult.

Photograph by B.Gantulga©

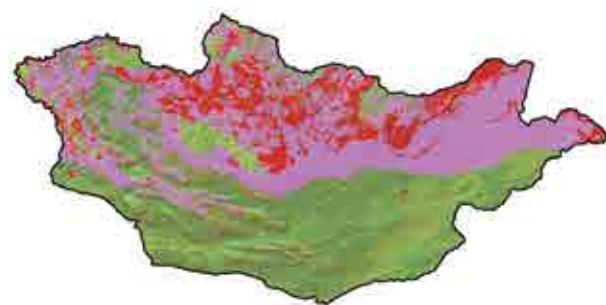


271. Azure-winged Magpie

Cyanopica cyanus

Breeding adult.

Photograph by B.Gantulga©

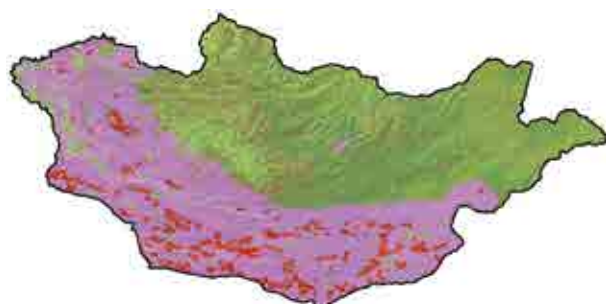


272. Black-billed Magpie

Pica pica

Breeding adult.

Photograph by S.Gombobaatar©

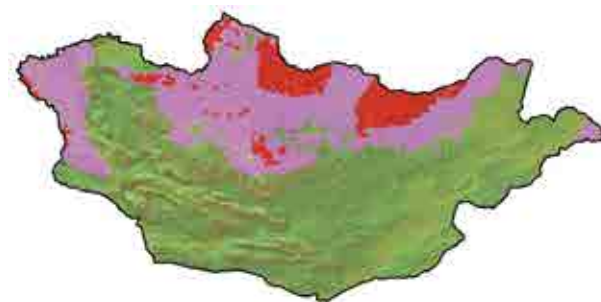


273. Mongolian Ground-jay

Podoces hendersoni

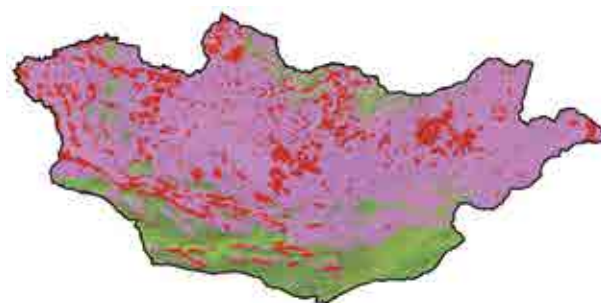
Adult.

Photograph by S.Gombobaatar©



274. Spotted Nutcracker
Nucifraga caryocatactes
Breeding adult.

Photograph by S.Gombobaatar©



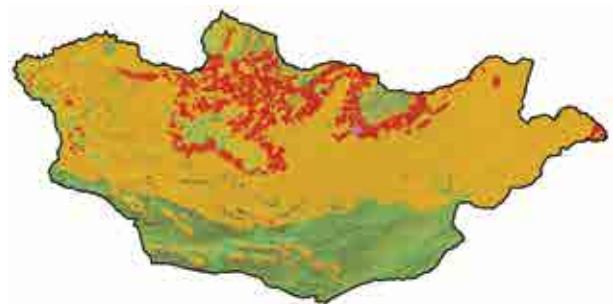
275. Red-billed Chough
Pyrrhonorax pyrrhonorax
Breeding adult.

Photograph by S.Gombobaatar©



276. Eurasian Jackdaw
Corvus monedula
Adults.

Photograph by S.Gombobaatar©

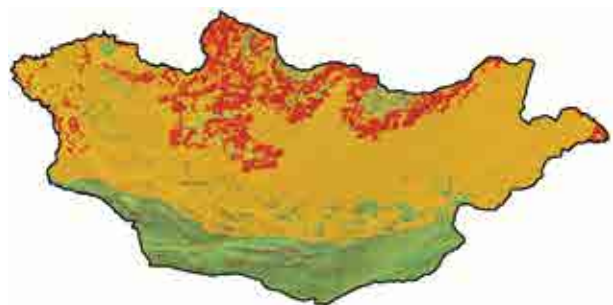


277. Daurian Jackdaw

Corvus dauuricus

Breeding adult (right) and breeding adult dark morph (left).

Photograph by S.Gombobaatar©

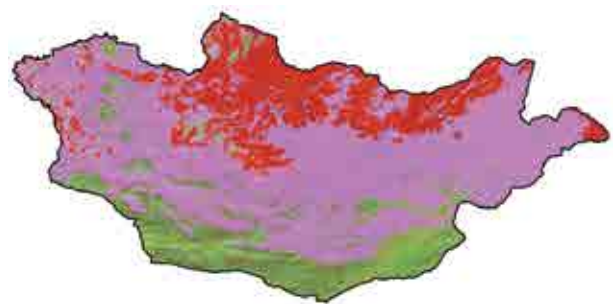


278. Rook

Corvus frugilegus

Breeding adult.

Photograph by S.Gombobaatar©

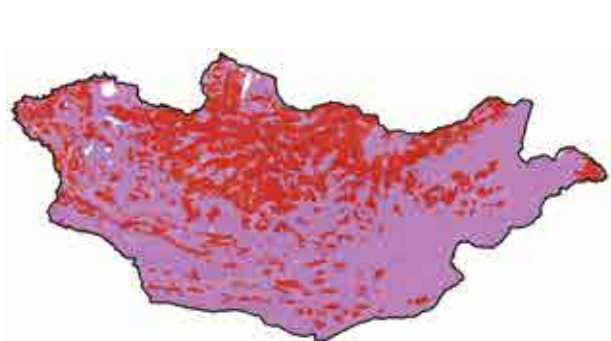


279. Carrion Crow

Corvus corone

Breeding adult (below) and adult Hooded Crow *C.c.cornix* (above).

Photograph by S.Gombobaatar©



280. Common Raven

Corvus corax

Adult.

Photograph by S.Gombobaatar©



281. Bohemian Waxwing

Bombycilla garrulus

Adult.

Photograph by S.Gombobaatar©

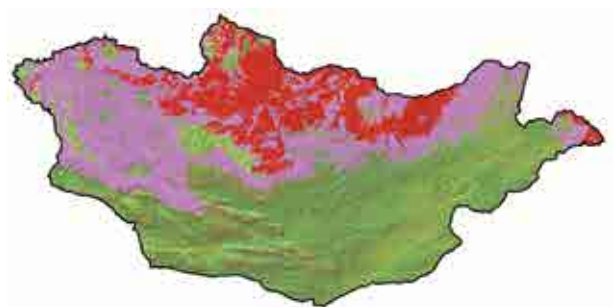


282. Japanese Waxwing

Bombycilla japonica

Adult in Japan.

Photograph by Hiromi Konishi©



283. Great Tit

Parus major

Breeding adult male.

Photograph by S.Gombobaatar©

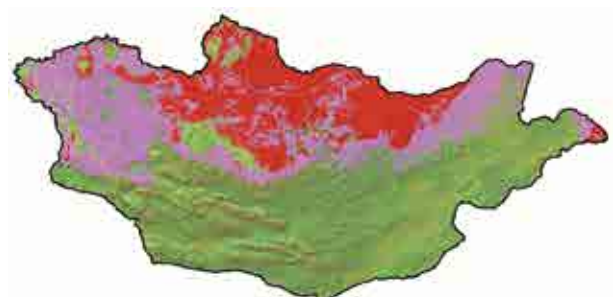


284. Marsh Tit

Parus palustris

Adult.

Photograph by S.Gombobaatar©



285. Willow Tit

Parus montanus

Adult.

Photograph by S.Gombobaatar©

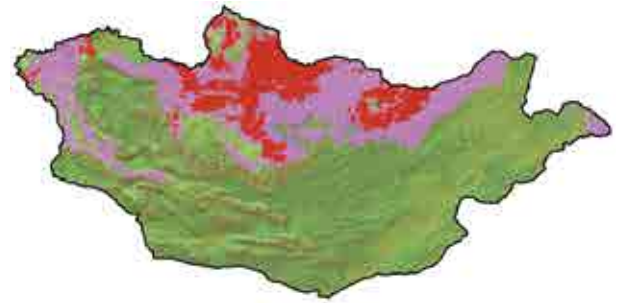


286. Siberian Tit

Parus cinctus

Adult in Finland.

Photograph by Jari Peltomaki©



287. Coal Tit

Parus ater

Breeding adult.

Photograph by S.Gombobaatar©

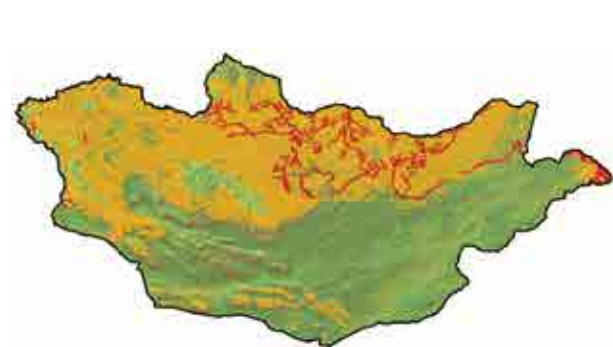


288. Azure Tit

Parus cyanus

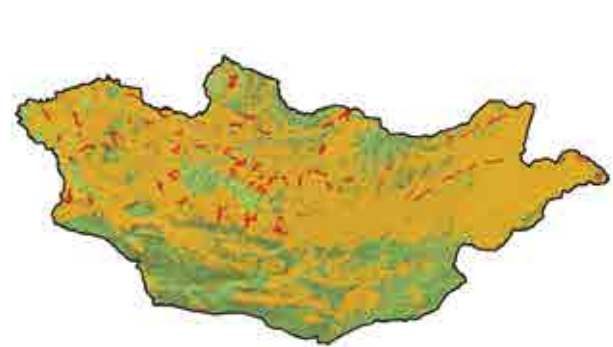
Breeding adult.

Photograph by S.Gombobaatar©



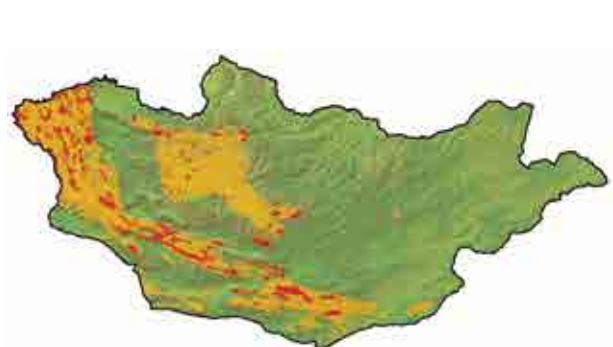
289. White-crowned Penduline-tit
Remiz coronatus
Breeding adult male (left) and female (right).

Photograph by S.Gombobaatar©



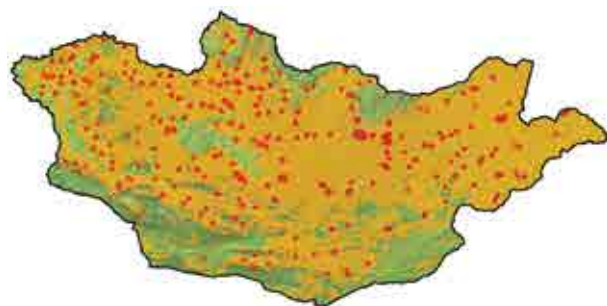
290. Sand Martin
Riparia riparia
Breeding adult (right) and Pale Sand Martin
R.r.diluta (left).

Photograph by S.Gombobaatar©



291. Eurasian Crag-martin
Ptyonoprogne rupestris
Breeding adult.

Photograph by S.Gombobaatar©



292. Barn Swallow

Hirundo rustica

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



293. Red-rumped Swallow

Hirundo daurica

Adult in Israel.

Photograph by S.Gombobaatar©

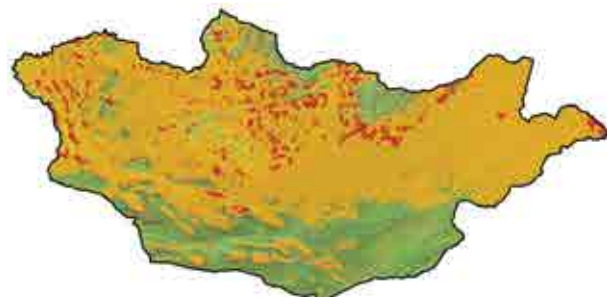


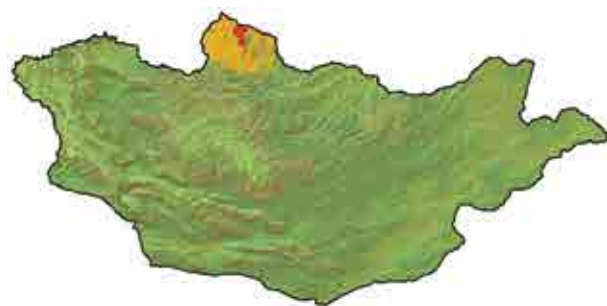
294. Northern House-martin

Delichon urbicum

Breeding adult.

Photograph by S.Gombobaatar©



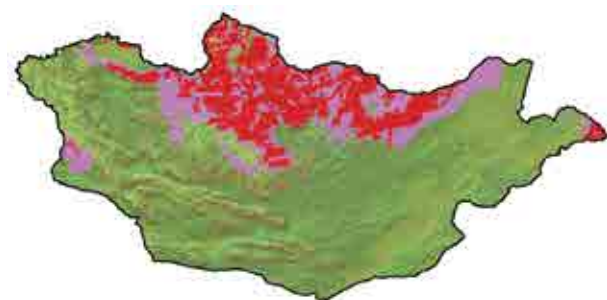


295. Asian House-martin

Delichon dasypus

Adult.

Photograph by Chan-Yong CHOI©

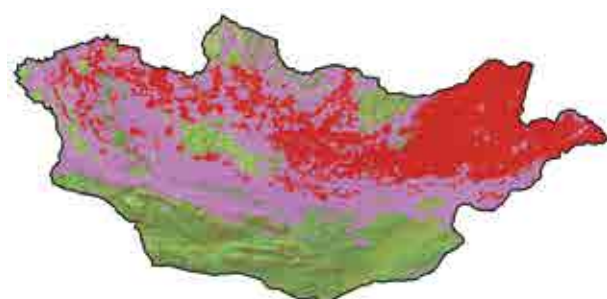


296. Long-tailed Tit

Aegithalos caudatus

Adult.

Photograph by S.Gombobaatar©



297. Mongolian Lark

Melanocorypha mongolica

Breeding adult male in flight and adult female (right).

Photograph by S.Gombobaatar©



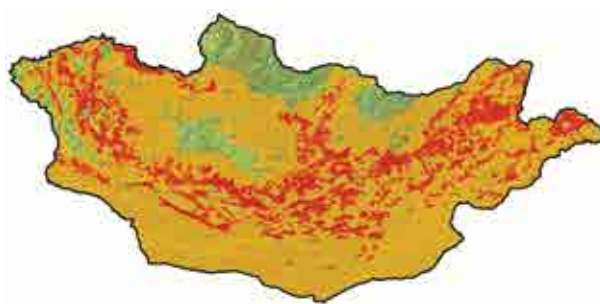
298. White-winged Lark
Melanocorypha leucoptera
Adult in Kazakhstan.

Photograph by Askar Isabekov©



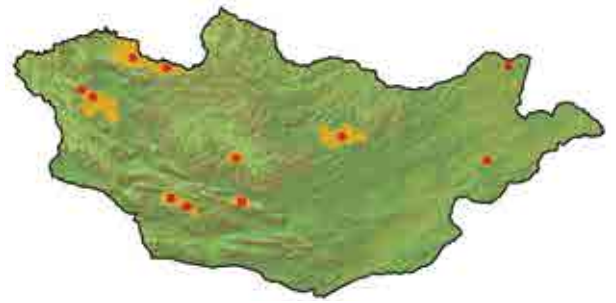
299. Black Lark
Melanocorypha yeltoniensis
Adult in Kazakhstan.

Photograph by Askar Isabekov©



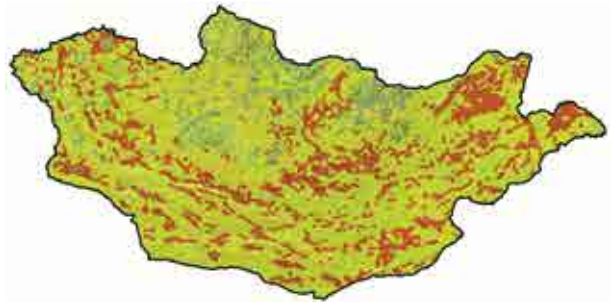
300. Greater Short-toed Lark
Calandrella brachydactyla
Breeding adult male.

Photograph by S.Gombobaatar©



301. Lesser Short-toed Lark
Calandrella rufescens
Breeding adult.

Photograph by S.Gombobaatar©



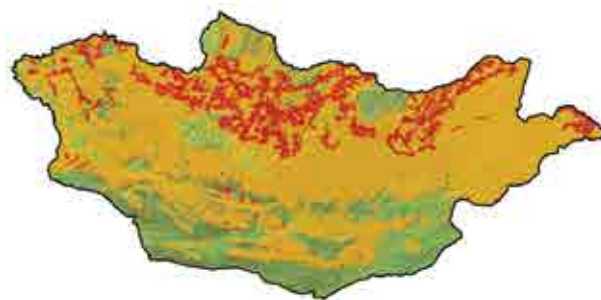
302. Asian Short-toed Lark
Calandrella cheleensis
Breeding adult male.

Photograph by S.Gombobaatar©



303. Crested Lark
Galerida cristata
Breeding adult.

Photograph by S.Gombobaatar©

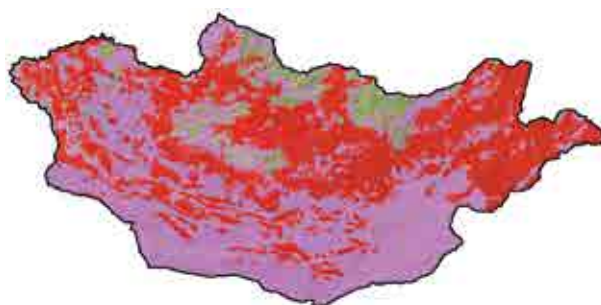


304. Eurasian Skylark

Alauda arvensis

Breeding adult male.

Photograph by S.Gombobaatar©



305. Horned Lark

Eremophila alpestris

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©



306. White-browed Chinese Warbler

Rhopophilus pekinensis

Adult in China.

Photograph by Tom Beeke©



307. Flavescent Bulbul

Pycnonotus flavescens

Adult.

Photograph by Yong Ding Li©

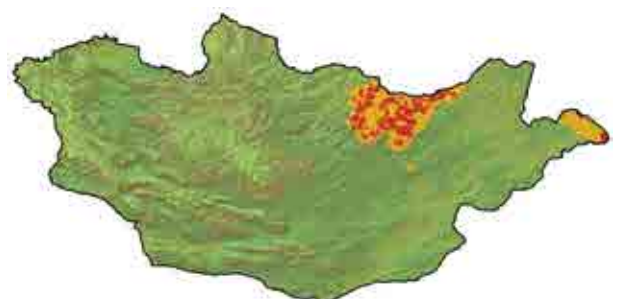


308. Spotted Bush-warbler

Bradypterus thoracicus

Adult.

Photograph by Yong Ding Li©



309. Chinese Bush-warbler

Bradypterus tacsanowskii

Breeding adult male.

Photograph by S.Gombobaatar©



310. Marsh Grassbird

Megalurus pryeri

Breeding adult male.

Photograph by S.Gombobaatar©



311. Lanceolated Warbler

Locustella lanceolata

Adult.

Photograph by S.Gombobaatar©



312. Common Grasshopper-warbler

Locustella naevia

Adult.

Photograph by Tom Tams©



313. Pallas's Grasshopper-warbler
Locustella certhiola
Breeding adult male.

Photograph by S.Gombobaatar©



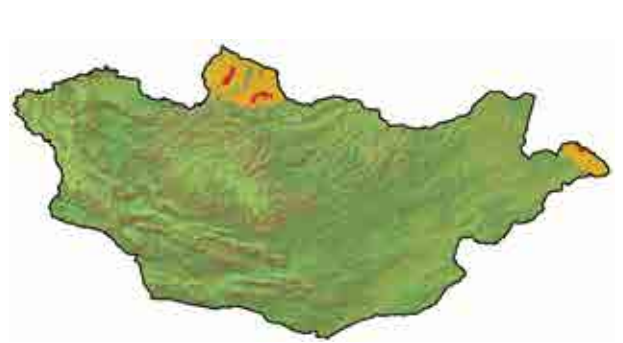
314. Middendorff's Grasshopper-warbler
Locustella ochotensis
Adult in Japan.

Photograph by Akira Nomura©



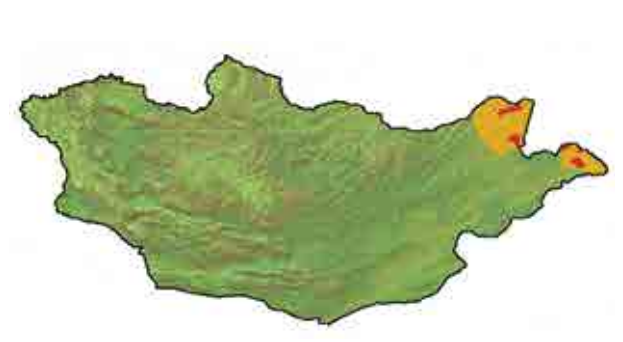
315. Savi's Warbler
Locustella luscinioides
Adult in Israel.

Photograph by S.Gombobaatar©



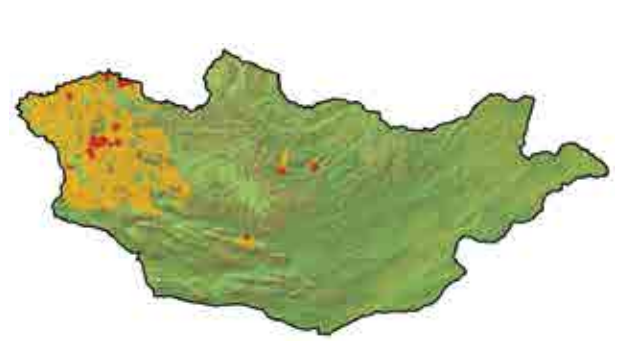
316. Gray's Grasshopper-warbler
Locustella fasciolata
Adult in Taiwan.

Photograph by Pan Chih-Yuan©



317. Black-browed Reed-warbler
Acrocephalus bistrigiceps
Breeding adult.

Photograph by S.Gombobaatar©



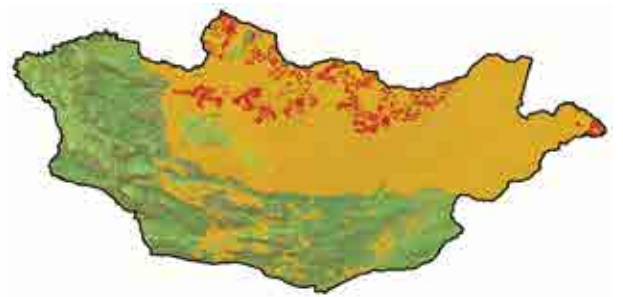
318. Paddyfield Warbler
Acrocephalus agricola
Breeding adult.

Photograph by S.Gombobaatar©



322. Clamorous Reed-warbler
Acrocephalus stentoreus
Adult in India.

Photograph by Nitin Srinivasamurthy©



323. Thick-billed Warbler
Acrocephalus aedon
Adult.

Photograph by S.Gombobaatar©



324. Booted Warbler
Hippolais caligata
Adult in India.

Photograph by Nitin Srinivasamurthy©



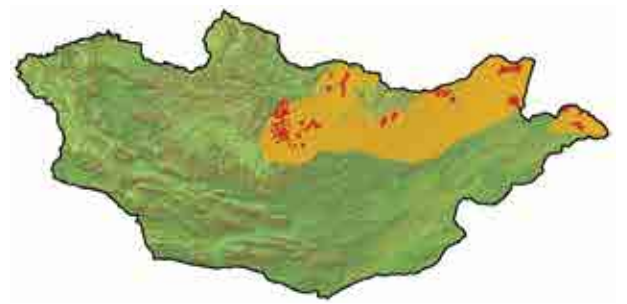
319. Blyth's Reed-warbler
Acrocephalus dumetorum
Breeding adult in India.

Photograph by Nitin Srinivasamurthy©



320. Great Reed-warbler
Acrocephalus arundinaceus
Adult.

Photograph by Barry Boswell©



321. Oriental Reed-warbler
Acrocephalus orientalis
Breeding adult.

Photograph by S.Gombobaatar©

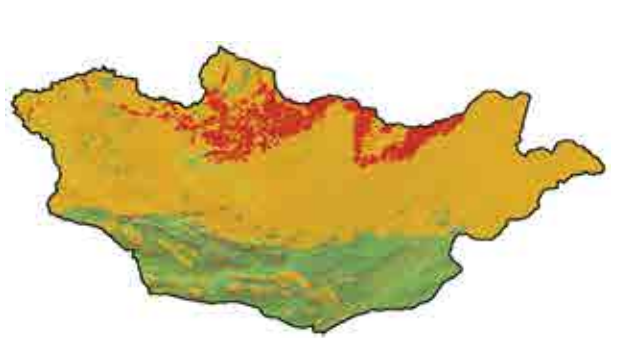


325. Willow Warbler

Phylloscopus trochilus

Adult in Israel.

Photograph by S.Gombobaatar©



326. Common Chiffchaff

Phylloscopus collybita

First winter.

Photograph by S.Gombobaatar©

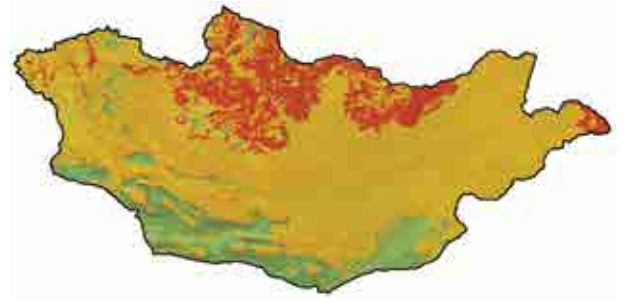


327. Wood Warbler

Phylloscopus sibilatrix

Adult in Japan.

Photograph by Akira Nomura©



328. Dusky Warbler

Phylloscopus fuscatus

Breeding adult.

Photograph by S.Gombobaatar©



329. Sulphur-bellied Warbler

Phylloscopus griseolus

Immature.

Photograph by S.Gombobaatar©

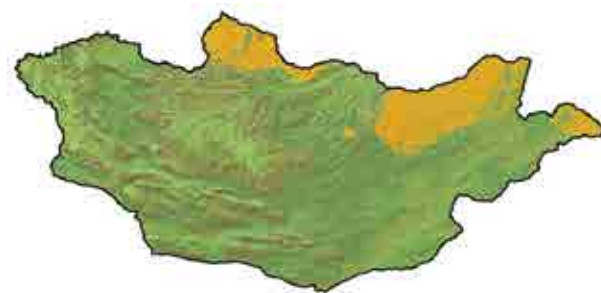


330. Yellow-streaked Warbler

Phylloscopus armandii

Adult in China.

Photograph by Bjorn Anderson©

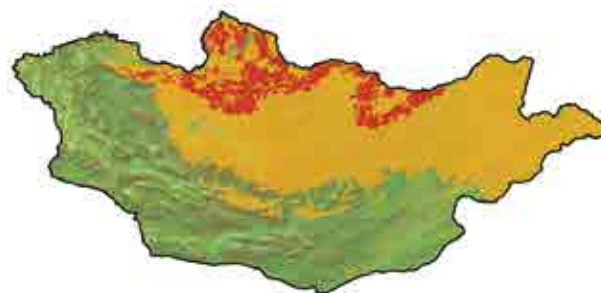


331. Radde's Warbler

Phylloscopus schwarzi

Adult in Japan.

Photograph by Akira Nomura©

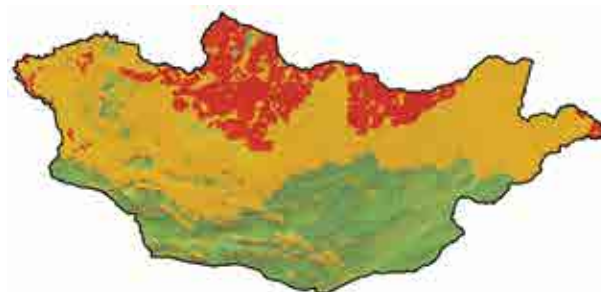


332. Pallas's Leaf-warbler

Phylloscopus proregulus

Adult.

Photograph by S.Gombobaatar©

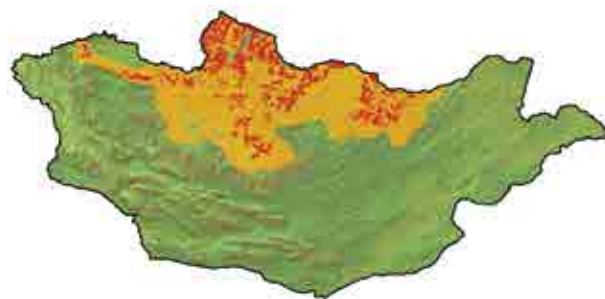


333. Inornate Warbler

Phylloscopus inornatus

Adult.

Photograph by S.Gombobaatar©

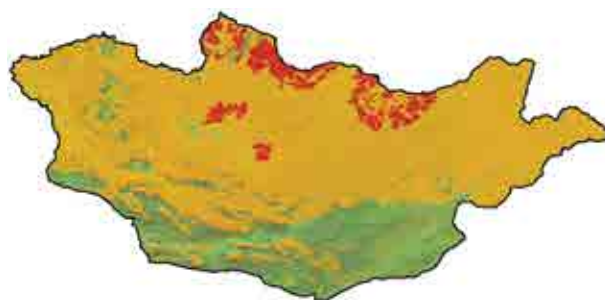


334. Hume's Leaf-warbler

Phylloscopus humei

Adult.

Photograph by S.Gombobaatar©

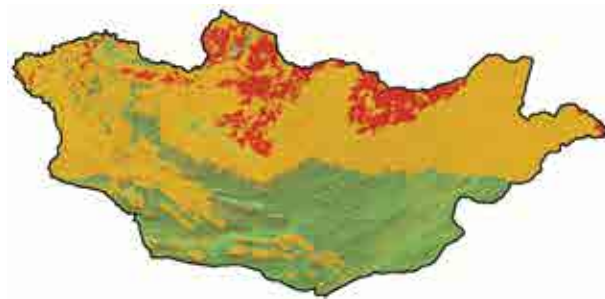


335. Arctic Warbler

Phylloscopus borealis

Adult.

Photograph by S.Gombobaatar©



336. Greenish Warbler

Phylloscopus trochiloides

Adult.

Photograph by S.Gombobaatar©



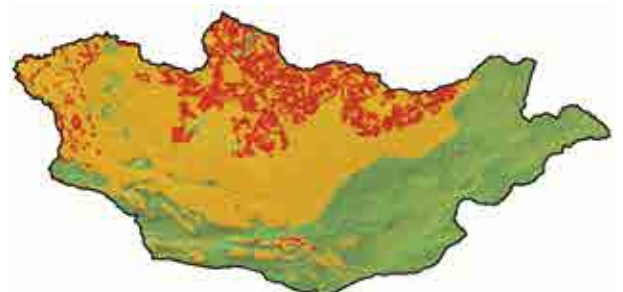
337. Pale-legged Leaf-warbler
Phylloscopus tenellipes
Adult in South Korea.

Photograph by Inki Kwon©



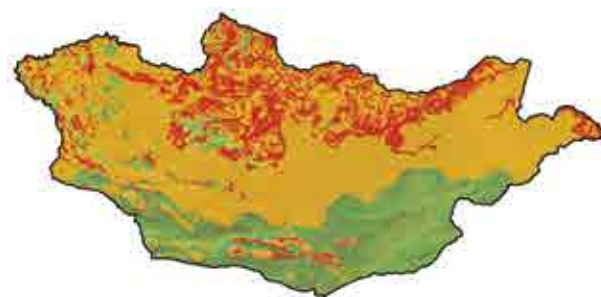
338. Blackcap
Sylvia atricapilla
Adult male (left) and adult female (right) in Israel.

Photograph by S.Gombobaatar©



339. Common Whitethroat
Sylvia communis
Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



340. Lesser Whitethroat

Sylvia curruca

Breeding adult male.

Photograph by S.Gombobaatar©

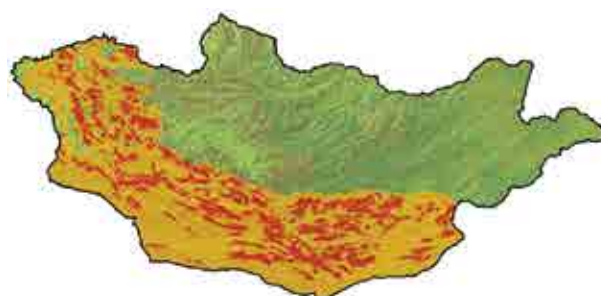


341. Hume's Whitethroat

Sylvia althaea

Adult in Kazakhstan.

Photograph by Askar Isabekov©

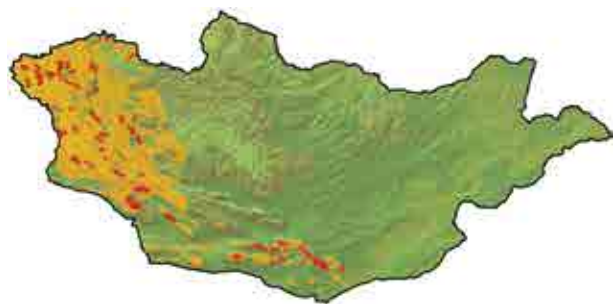


342. Asian Desert Warbler

Sylvia nana

Breeding adult.

Photograph by S.Gombobaatar©



343. Barred Warbler

Sylvia nisoria

Adult female (left) and male (right).

Photograph by Sh.Boldbaatar© and S.Gombobaatar©



344. Bearded Parrotbill

Panurus biarmicus

Breeding adult male (left), adult female (above-right) and juvenile male (below-right).

Photograph by Ch.Uuganbayar© and S.Gombobaatar©



345. Vinous-throated Parrotbill

Paradoxornis webbiana

Adult in South Korea.

Photograph by S.Gombobaatar©

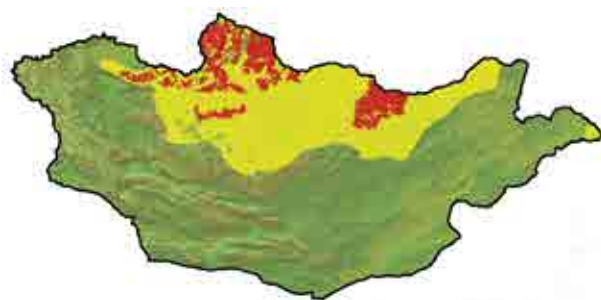


346. Reed Parrotbill

Paradoxornis heudei

Breeding adult.

Photograph by S.Gombobaatar©



347. Goldcrest

Regulus regulus

Adult female.

Photograph by Kh.Tumendelger©

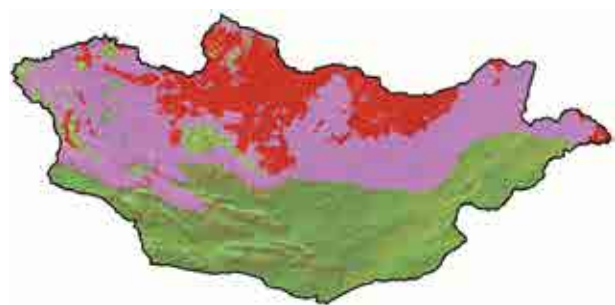


348. Winter Wren

Troglodytes troglodytes

Adult in Japan.

Photograph by Akira Nomura©



349. Wood Nuthatch

Sitta europaea

Breeding adult.

Photograph by S.Gombobaatar©

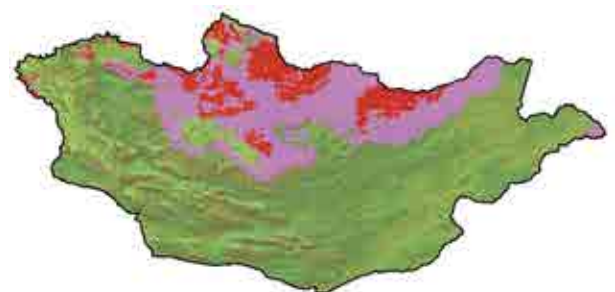


350. Wallcreeper

Tichodroma muraria

Adult female.

Photograph by S.Gombobaatar©



351. Eurasian Treecreeper

Certhia familiaris

Immature.

Photograph by S.Gombobaatar©



352. Crested Myna

Acridotheres cristatellus

Adult in Taiwan.

Photograph by Jo Ann MacKenzie©



353. Purple-backed Starling

Sturnus sturninus

Adult male in China and female in Mongolia.

Photograph by Jonathan Martinez© and
S.Gombobaatar©

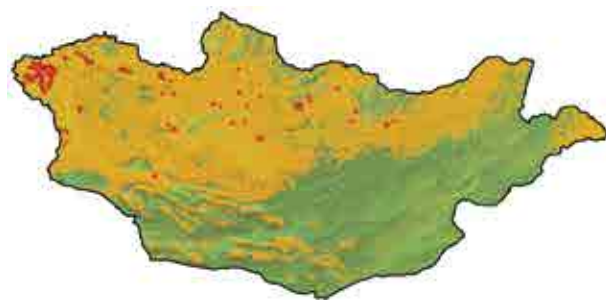


354. Rosy Starling

Sturnus roseus

Adults and immatures.

Photograph by Sh.Boldbaatar©

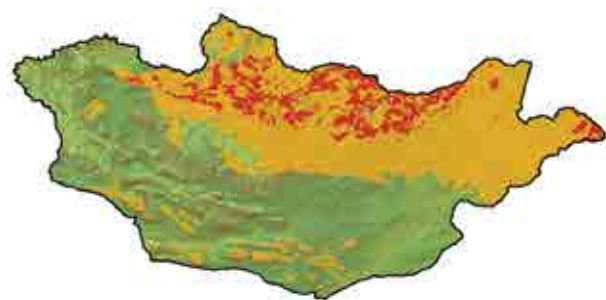


355. Common Starling

Sturnus vulgaris

Adult male.

Photograph by B.Gantulga©

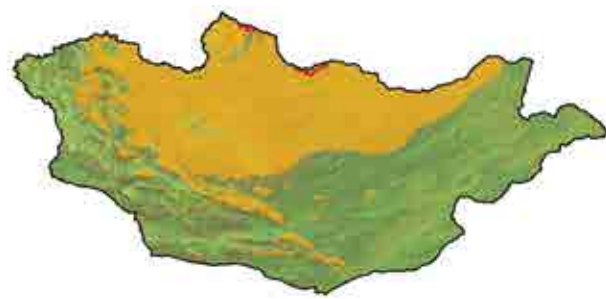


356. White-cheeked Starling

Sturnus cineraceus

Adult.

Photograph by S.Gombobaatar©

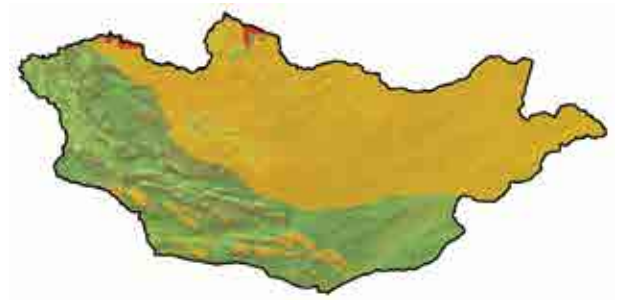


357. Siberian Thrush

Zoothera sibirica

Breeding adult male (left) and immature male (right).

Photograph by Ch.Uuganbayar© and Kh.Tumendelger©



358. Eurasian Scaly Thrush

Zoothera dauma

Adult.

Photograph by S.Gombobaatar©



359. Eurasian Blackbird

Turdus merula

Adult male (above) and adult female (below) in Israel.

Photograph by S.Gombobaatar©

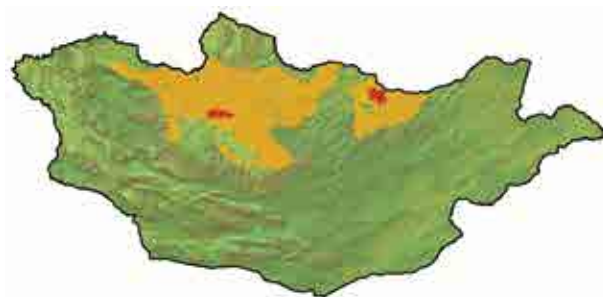


360. Eyebrowed Thrush

Turdus obscurus

Adult.

Photograph by S.Gombobaatar©

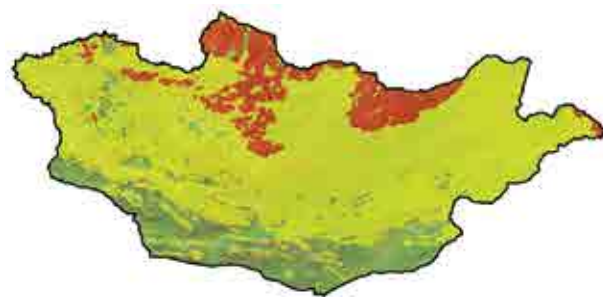


361. Pale Thrush

Turdus pallidus

Adult in Japan.

Photograph by S.Gombobaatar©



362. Red-throated Thrush

Turdus ruficollis

Breeding adult *T.r.ruficollis* (right).

Black-throated Thrush *T.r.trogularis* immature (left).

Photograph by S.Gombobaatar©



363. Naumann's Thrush

Turdus naumanni

Breeding adult *T.n.naumanni* (left).

Dusky Thrush *T.n.enomus* adult (right).

Photograph by S.Gombobaatar©



364. Fieldfare

Immature.

Turdus pilaris

Photograph by S.Gombobaatar©

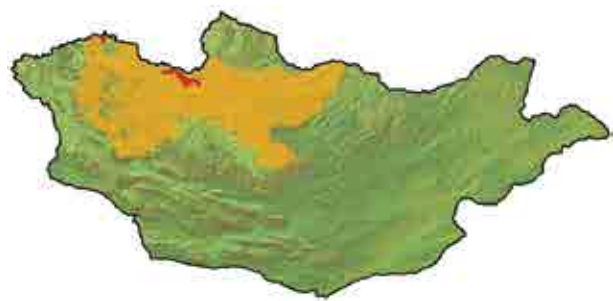


365. Redwing

Adult.

Turdus iliacus

Photograph by Tom Tams©

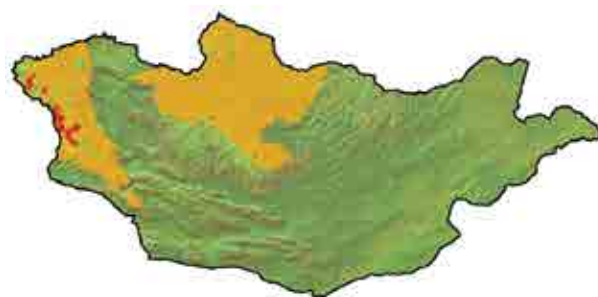


366. Song Thrush

Adult in Sweden.

Turdus philomelos

Photograph by Kah Wai Lin©



367. Mistle Thrush
Adult in Kazakhstan.

Turdus viscivorus

Photograph by Askar Isabekov©



368. European Robin
Adult in UK.

Erithacus rubecula

Photograph by Guy Shorrock©



369. Rufous-tailed Robin
Adult.

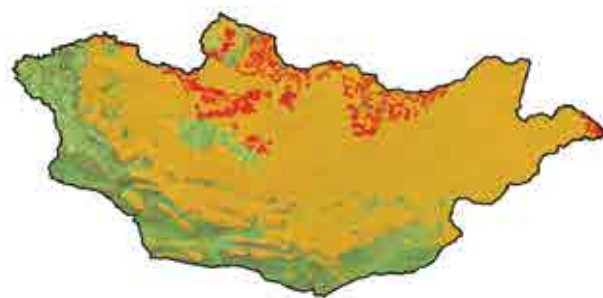
Luscinia sibilans

Photograph by Martin Hale©



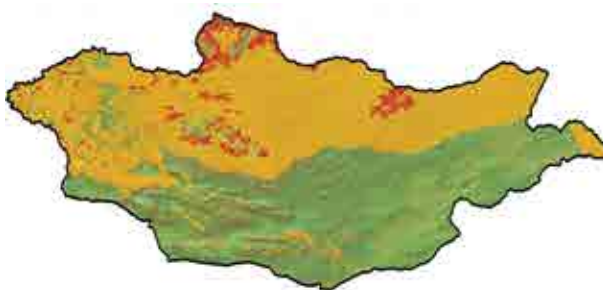
370. Common Nightingale
Luscinia megarhynchos
Adult in Uzbekistan.

Photograph by Richard Reading©



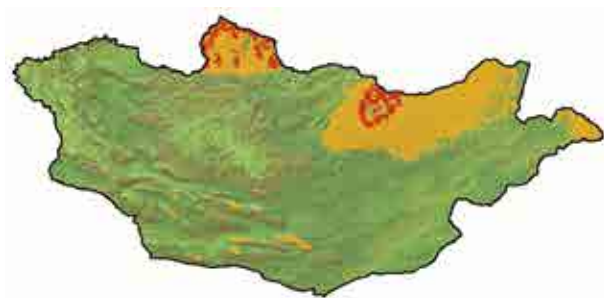
371. Siberian Rubythroat
Luscinia calliope
Breeding adult male (above) and adult female
(below).

Photograph by S.Gombobaatar©



372. Bluethroat
Luscinia svecica
Breeding adult male (left) and adult female
(right).

Photograph by Sh. Boldbaatar© and
Kh.Tumendelger©

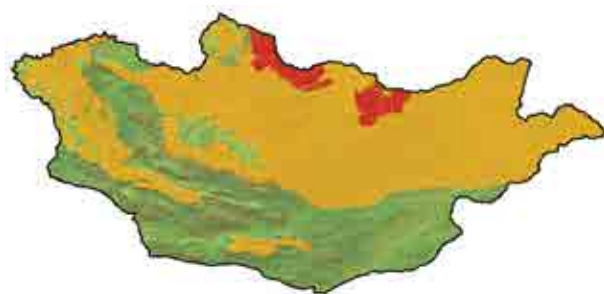


373. Siberian Blue Robin

Luscinia cyane

Breeding adult male (left) in Japan and first year male? (right).

Photograph by Akira Nomura© and David Bakewell©

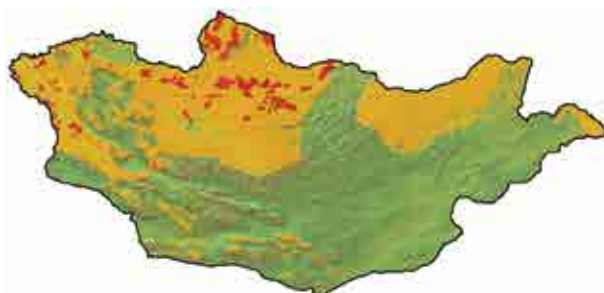


374. Orange-flanked Bush-robin

Tarsiger cyanurus

Immature male (left) and adult female (right).

Photograph by S.Gombobaatar©

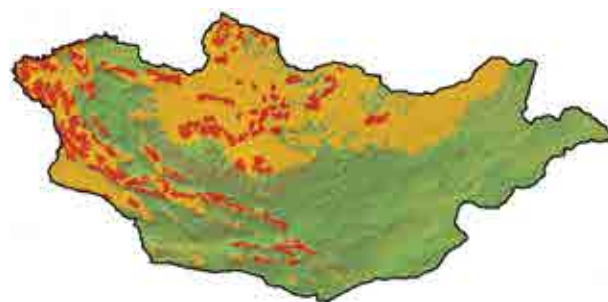


375. Rufous-backed Redstart

Phoenicurus erythronotus

Adult male in Kazakhstan.

Photograph by Askar Isabekov©

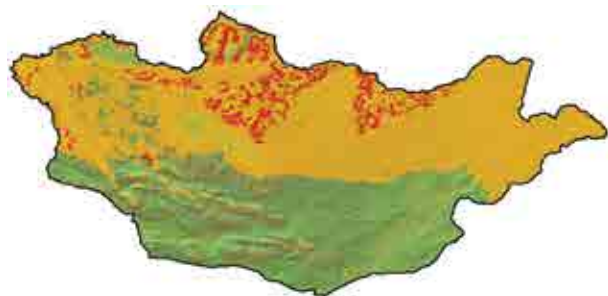


376. Black Redstart

Phoenicurus ochruros

Breeding adult male (left) and adult female (right).

Photograph by D.Usukhjargal©

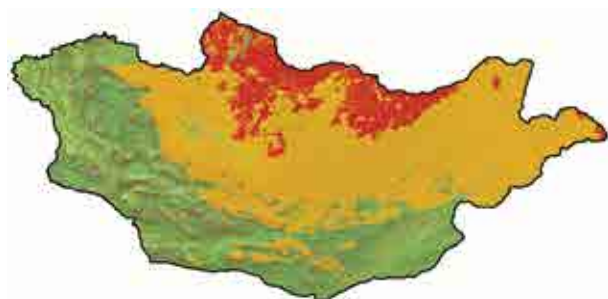


377. Common Redstart

Phoenicurus phoenicurus

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©

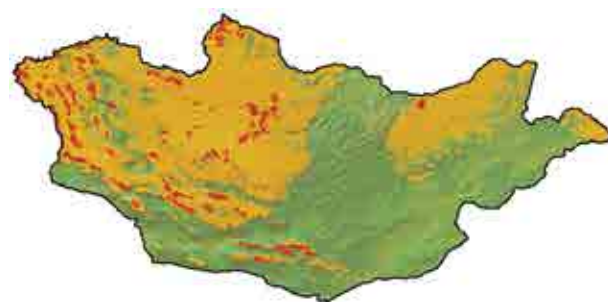


378. Daurian Redstart

Phoenicurus aureoreus

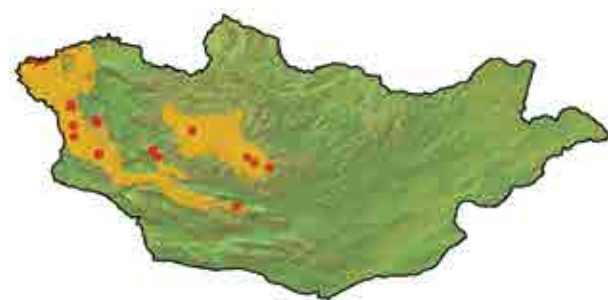
Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



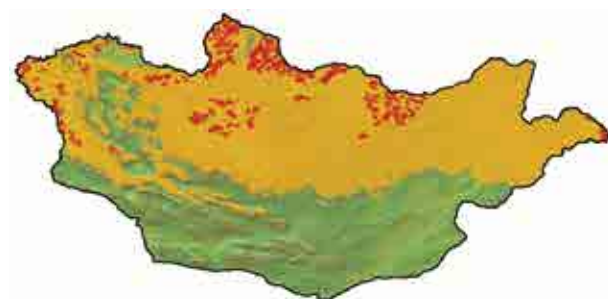
379. White-winged Redstart
Phoenicurus erythrogastrus
Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



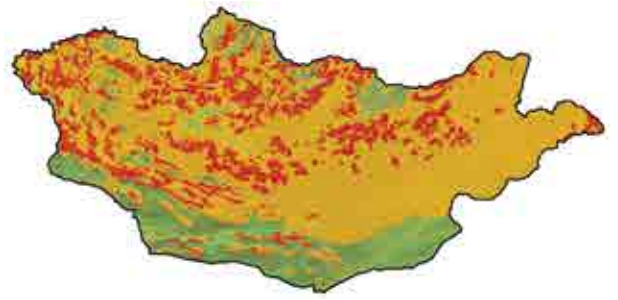
380. White-throated Bushchat
Saxicola insignis
Breeding adult.

Photograph by S.Gombobaatar©



381. Common Stonechat
Saxicola torquatus
Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©

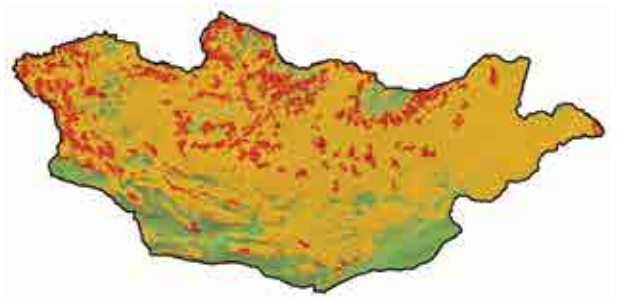


382. Northern Wheatear

Oenanthe oenanthe

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©



383. Pied Wheatear

Oenanthe pleschanka

Breeding adult male (above) and adult female (female).

Photograph by S.Gombobaatar©

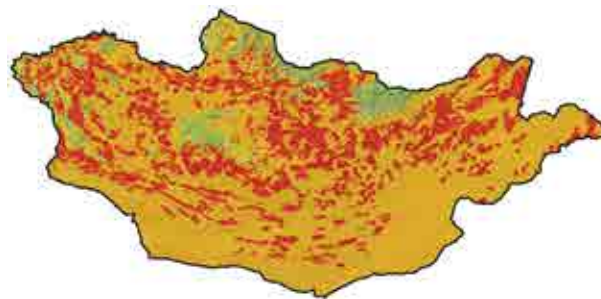


384. Desert Wheatear

Oenanthe deserti

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©

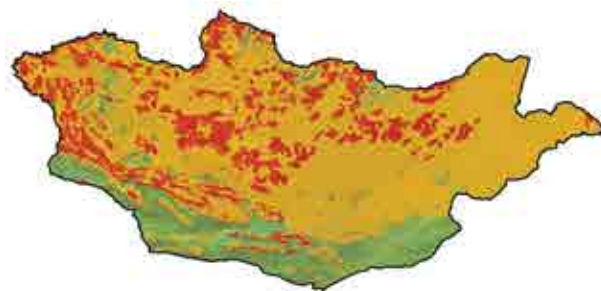


385. Isabelline Wheatear

Oenanthe isabellina

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©



386. Rufous-tailed Rock-thrush

Monticola saxatilis

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



387. White-throated Rock-thrush

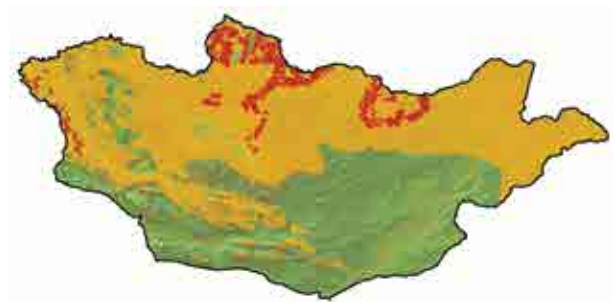
Petrophila gularis

Adult male (left) in Singapore and adult female (right) in South Korea.

Photograph by Yong Ding Li© and Young Min Moon©



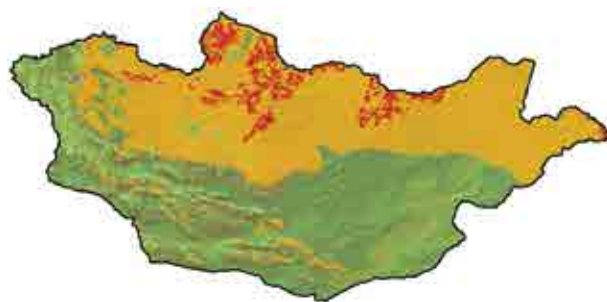
388. Blue Rock-thrush
Monticola solitarius
Breeding adult female (left) and adult male
(right) in South Korea.
Photograph by S.Gombobaatar©



389. Spotted Flycatcher
Muscicapa striata
Adult.
Photograph by S.Gombobaatar©



390. Grey-streaked Flycatcher
Muscicapa griseisticta
Adult in Japan.
Photograph by Akira Nomura©

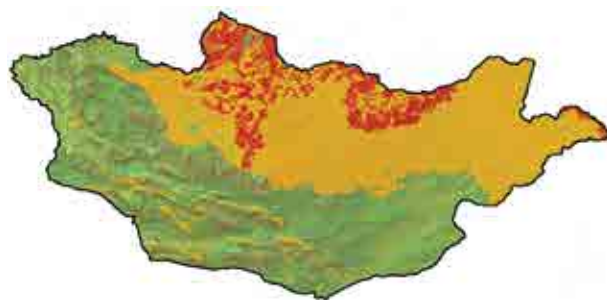


391. Dark-sided Flycatcher

Muscicapa sibirica

Adult.

Photograph by S.Gombobaatar©



392. Asian Brown Flycatcher

Muscicapa dauurica

Adult.

Photograph by S.Gombobaatar©

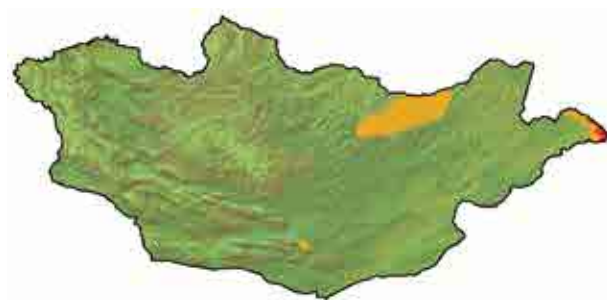


393. European Pied Flycatcher

Ficedula hypoleuca

Adult male (left) and adult female (right) in Germany.

Photograph by Frank Weihe©



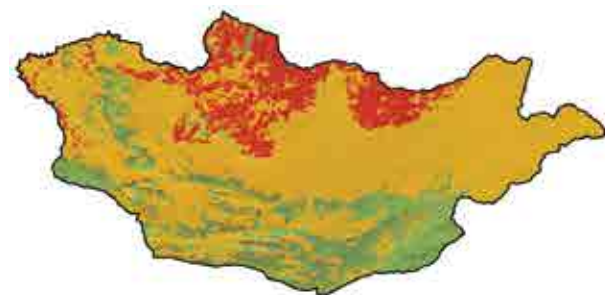
394. Yellow-rumped Flycatcher
Ficedula zanthopygia
 Breeding adult male (left) in South Korea and
 adult female (right) in Japan.
 Photograph by Hyun-Young NAM© and
 Akira Nomura©



395. Narcissus Flycatcher
Ficedula narcissina
 Breeding adult male (left) and immature
 female (right) in South Korea.
 Photograph by Hyun-Young NAM© and
 Chang-Yong-CHOI©



396. Mugimaki Flycatcher
Ficedula mugimaki
 Breeding adult male (left) and adult female
 (right) in Japan.
 Photograph by Akira Nomura©

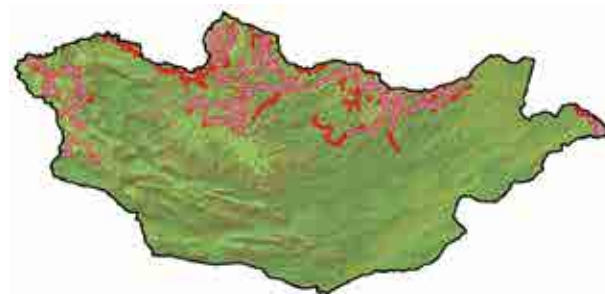


397. Taiga Flycatcher

Ficedula albicilla

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©

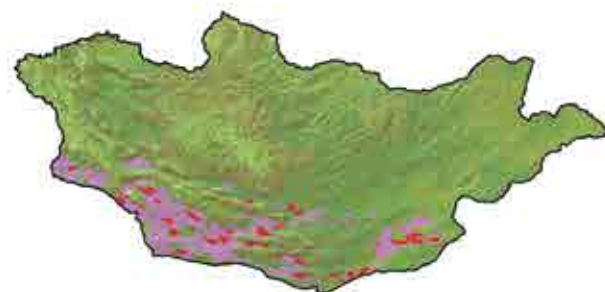


398. White-throated Dipper

Cinclus cinclus

Adult.

Photograph by S.Gombobaatar©

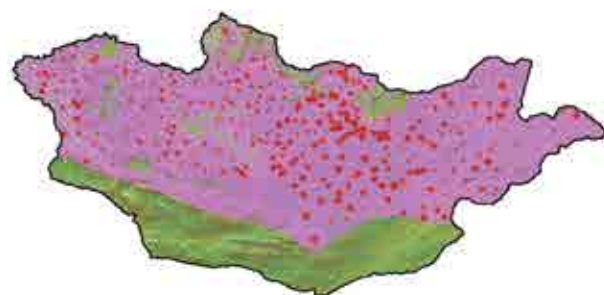


399. Saxaul Sparrow

Passer ammodendri

Breeding adult male (above) and adult female (below).

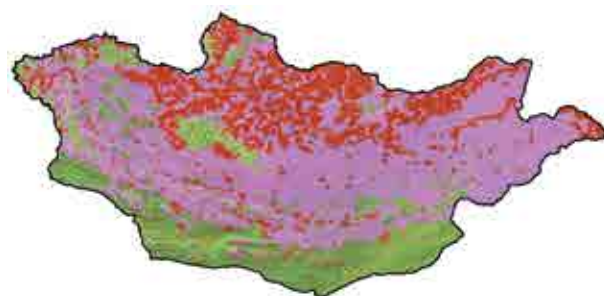
Photograph by S.Gombobaatar©



400. House Sparrow

Passer domesticus
Breeding adult male (right) and adult female
(left).

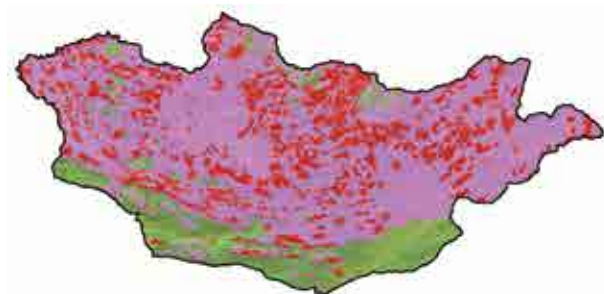
Photograph by S.Gombobaatar©



401. Eurasian Tree Sparrow

Passer montanus
Breeding adult male.

Photograph by S.Gombobaatar©



402. Rock Sparrow

Petronia petronia
Breeding adult male (left) and adult female
(right).

Photograph by S.Gombobaatar©



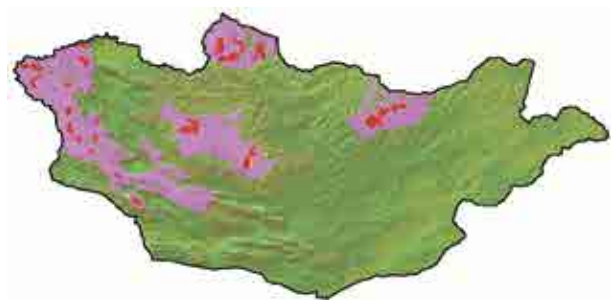
403. White-winged Snowfinch
Montifringilla nivalis
Breeding adult male (above) and adult female
(below).
Photograph by S.Gombobaatar© and
B.Gantulga©



404. Small Snowfinch
Pyrgilauda davidiana
Breeding adult male (left) and adult female
(right).
Photograph by S.Gombobaatar©

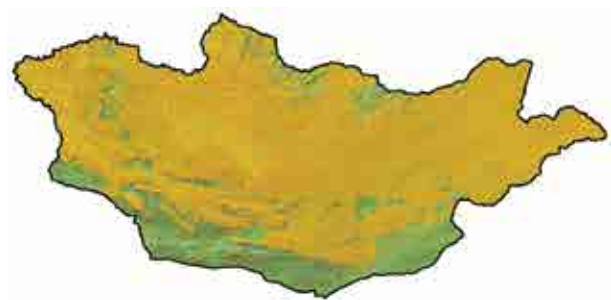


405. Alpine Accentor
Prunella collaris
Breeding adult.
Photograph by B.Gantulga©



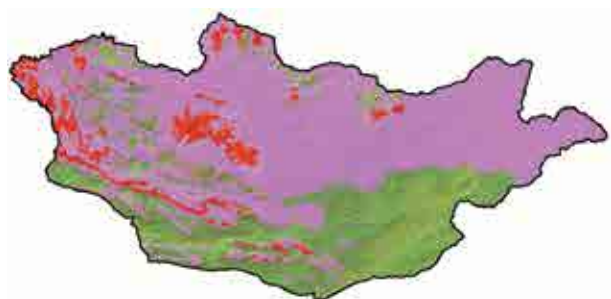
406. Rufous-streaked Accentor
Prunella himalayana
Adult in Kazakhstan.

Photograph by Gennady Dyakin©



407. Siberian Accentor
Prunella montanella
Adult.

Photograph by S.Gombobaatar©



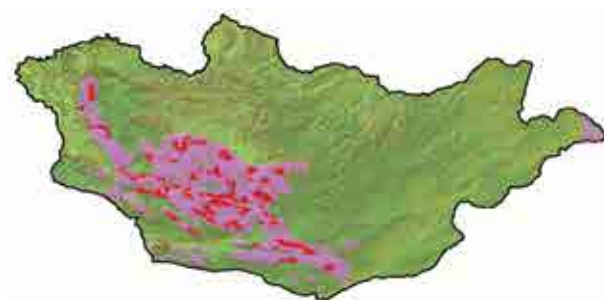
408. Brown Accentor
Prunella fulvescens
Adult.

Photograph by S.Gombobaatar©



409. Black-throated Accentor
Prunella atrogularis
Adult in Kazakhstan.

Photograph by Askar Isabekov©



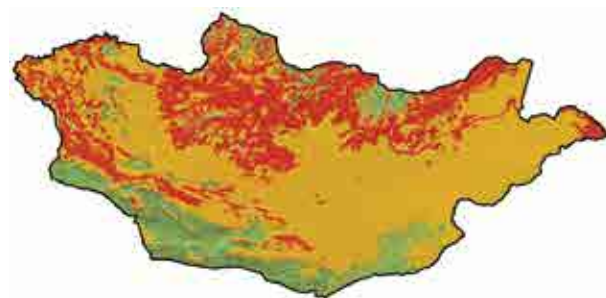
410. Mongolian Accentor
Prunella koslowi
Breeding adult.

Photograph by S.Gombobaatar©



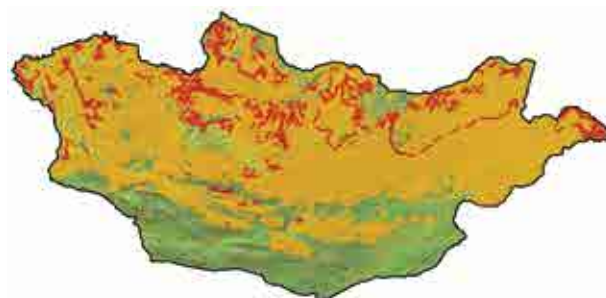
411. Forest Wagtail
Dendronanthus indicus
Adult in Japan.

Photograph by Akira Nomura©



412. White Wagtail *Motacilla alba*
Breeding adult male (left -above) and adult female (*M.a.baicalensis*) (above-right).
Breeding adult male (*M.a.ocularis*) (below-left).
Breeding adult male (*M.a.personata*) (below right).

Photograph by S.Gombobaatar©

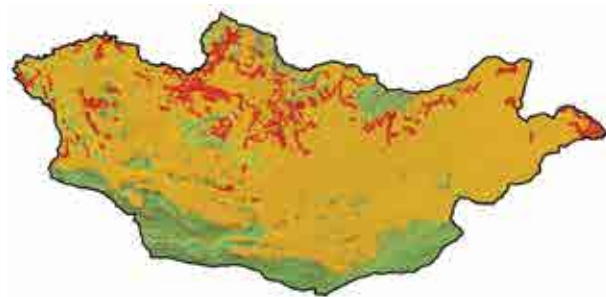


413. Citrine Wagtail

Motacilla citreola

Breeding adult male (above) and adult female (below)

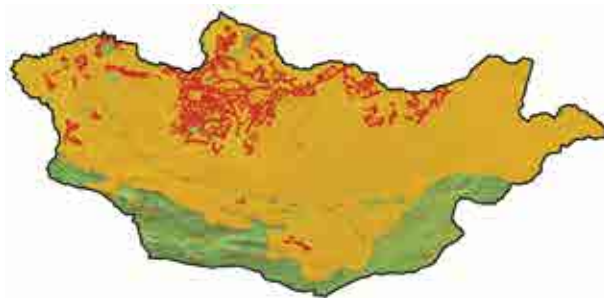
Photograph by S.Gombobaatar©



414. Yellow Wagtail *Motacilla flava*

Breeding adult male (above).
Breeding adult *M.f.leucocephala* (below-left),
M.f.macronyx (below-centre), *M.f.taivana* (below-right).

Photograph by S.Gombobaatar© and Sh.Boldbaatar©



415. Grey Wagtail

Motacilla cinerea

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©

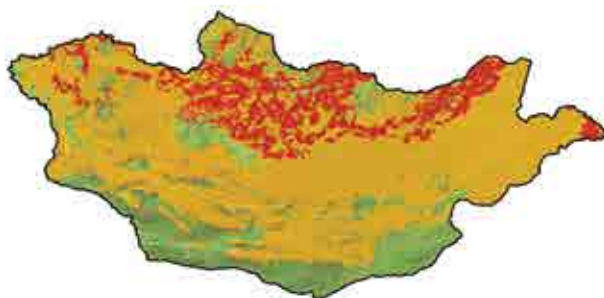


416. Richard's Pipit

Anthus richardi

Breeding adult.

Photograph by S.Gombobaatar©

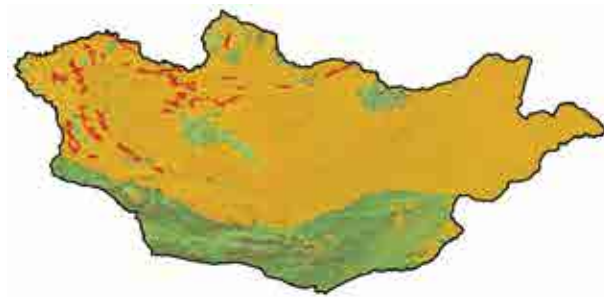


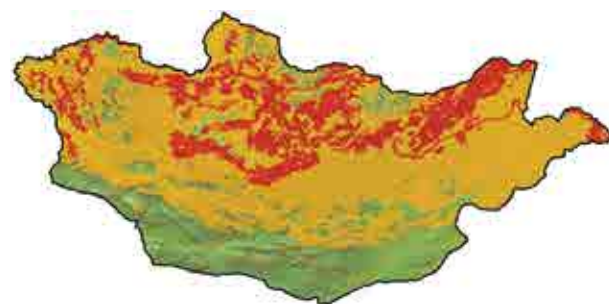
417. Tawny Pipit

Anthus campestris

Adult.

Photograph by S.Gombobaatar©



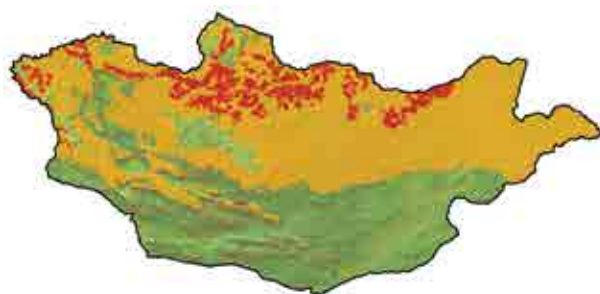


418. Blyth's Pipit

Anthus godlewskii

Breeding adult.

Photograph by S.Gombobaatar©

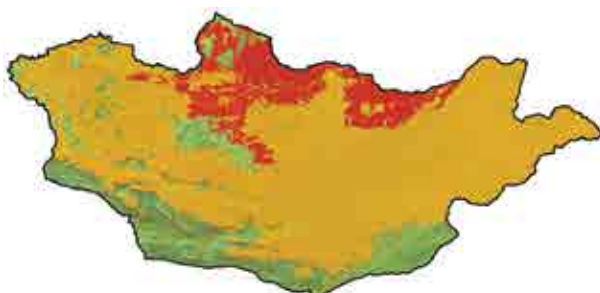


419. Tree Pipit

Anthus trivialis

Breeding adult.

Photograph by S.Gombobaatar©



420. Olive-backed Pipit

Anthus hodgsoni

Breeding adult.

Photograph by S.Gombobaatar©



421. Pechora Pipit

Anthus gustavi

Adult in South Korea.

Photograph by Chang-Yong CHOI©

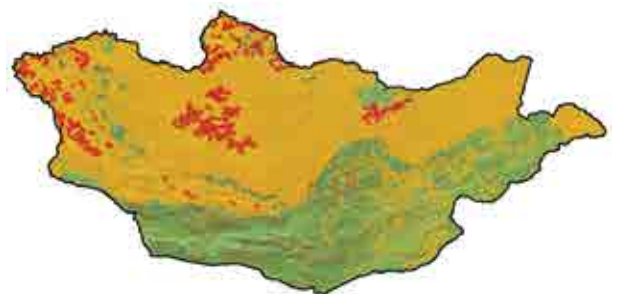


422. Red-throated Pipit

Anthus cervinus

Adult in Israel.

Photograph by S.Gombobaatar©



423. Water Pipit

Anthus spinoletta

Adult in non-breeding plumage.

Photograph by S.Gombobaatar©

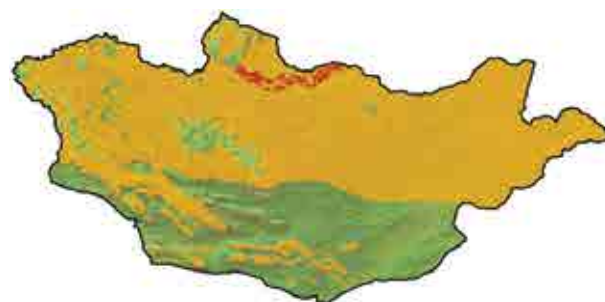


425. Eurasian Chaffinch

Fringilla coelebs

Adult male in Israel.

Photograph by S.Gombobaatar©



426. Brambling

Fringilla montifringilla

Adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



427. Fire-fronted Serin

Serinus pusillus

Adult male (right) in Kazakhstan and juvenile (left) in Mongolia.

Photograph by Askar Isabekov© and Richard Reading©



428. European Greenfinch

Carduelis chloris

Adult male (right) and adult female (left) in Israel.

Photograph by S.Gombobaatar©



429. Grey-capped Greenfinch

Carduelis sinica

Adult male (left) and adult female (right) in Japan.

Photograph by S.Gombobaatar©

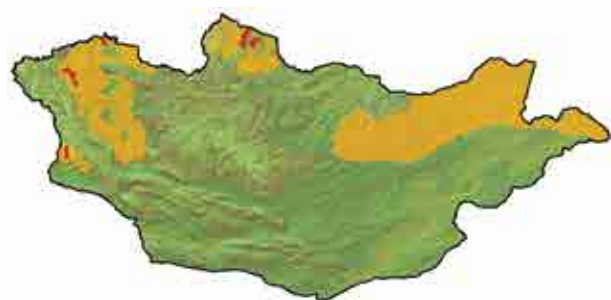


430. Eurasian Siskin

Carduelis spinus

Adult male (right) and adult female (left).

Photograph by S.Gombobaatar©



431. European Goldfinch

Carduelis carduelis

Adult in Kazakhstan.

Photograph by Askar Isabekov©



432. Common Redpoll

Carduelis flammea

Adult male (above) and adult female (below).

Photograph by S.Gombobaatar©

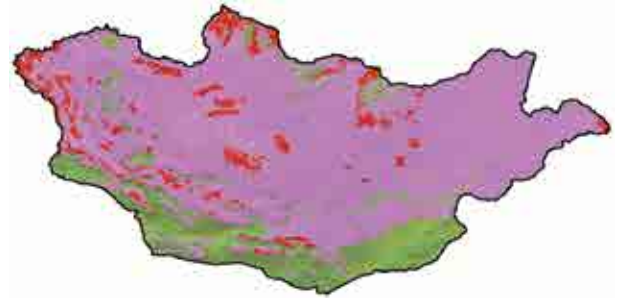


433. Hoary Redpoll

Carduelis hornemanni

Adult male (above) and adult female (below).

Photograph by S.Gombobaatar©



434. Twite

Carduelis flavirostris

Breeding adult.

Photograph by S.Gombobaatar©



435. Eurasian Linnet

Carduelis cannabina

Adult males and female in Kazakhstan.

Photograph by Askar Isabekov©

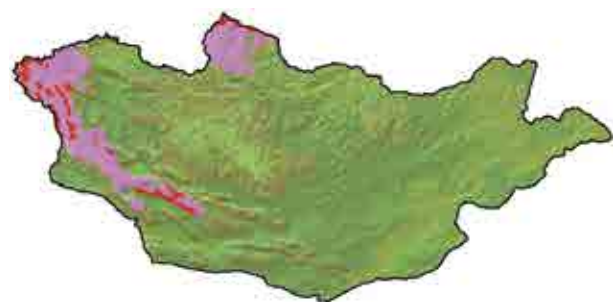


436. Plain Mountain-finch

Leucosticte nemoricola

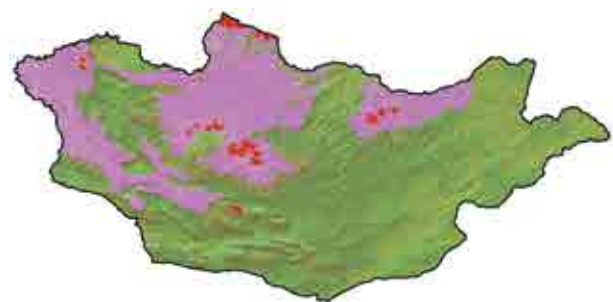
Adult in India.

Photograph by Manjula Mathur©



437. Black-headed Mountain-finch
Leucosticte brandti
Adult male in India.

Photograph by Manoj Sharma©



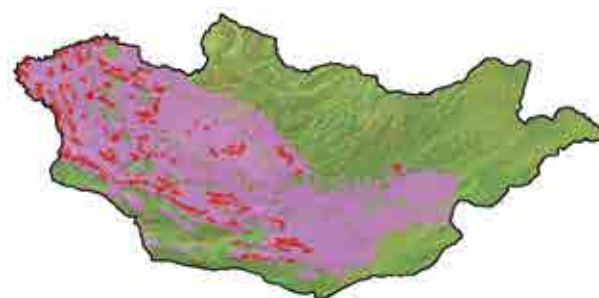
438. Asian Rosy-finch
Leucosticte arctoa
Breeding adult male.

Photograph by D.Batmunkh©



439. Desert Finch
Rhodopechys obsoletus
Adult in Israel.

Photograph by S.Gombobaatar©

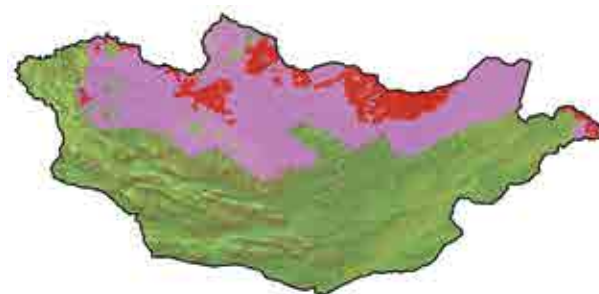


440. Mongolian Finch

Bucanetes mongolicus

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©

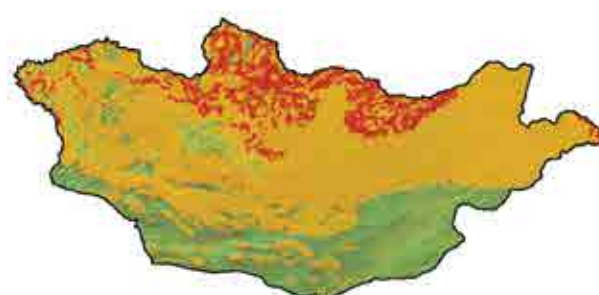


441. Long-tailed Rosefinch

Uragus sibiricus

Breeding adult male (left), immature male (left-below), and adult female (right -below).

Photograph by S.Gombobaatar©

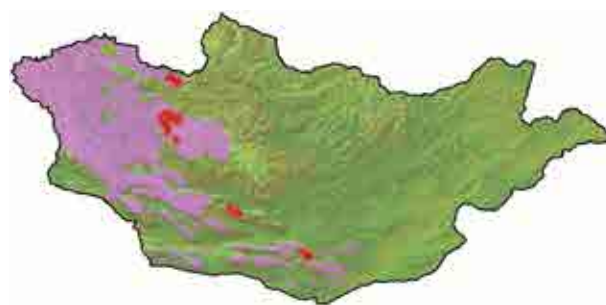


442. Common Rosefinch

Carpodacus erythrinus

Breeding adult male (right) and adult female (left).

Photograph by S.Gombobaatar©



443. Beautiful Rosefinch
Carpodacus pulcherrimus
 Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



444. Pallas's Rosefinch
Carpodacus roseus
 Breeding adult male (left) and adult female (right) in China.

Photograph by Tom Beeke©



445. Red-mantled Rosefinch
Carpodacus rhodochlamys
 Breeding adult male (left) and adult female (right) in Kazakhstan.

Photograph by Askar Isabekov©

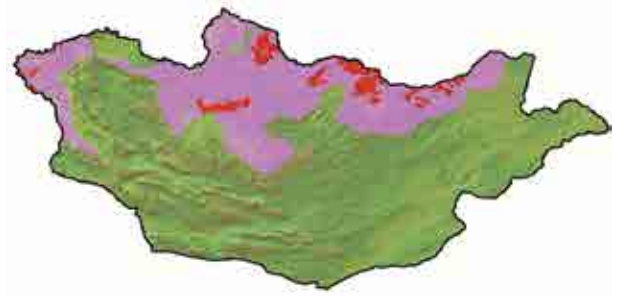


446. Great Rosefinch

Carpodacus rubicilla

Breeding adult male (above) and adult female (below).

Photograph by S.Gombobaatar©

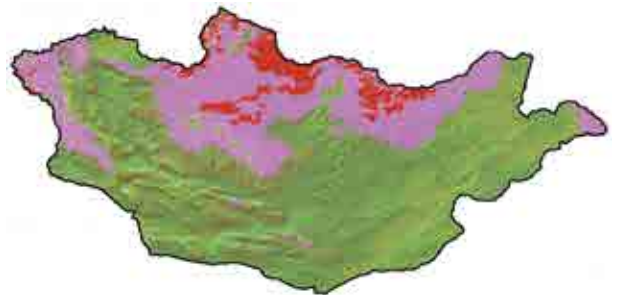


447. Pine Grosbeak

Pinicola enucleator

Breeding adult male (left) and adult female (right) in Russia.

Photograph by T.Ikeuchi©

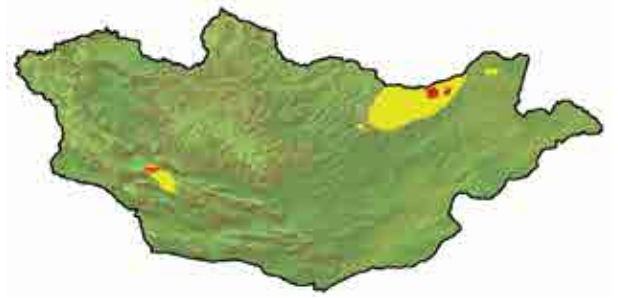


448. Red Crossbill

Loxia curvirostra

Breeding adult male (left) and adult female (right).

Photograph by B.Gantulga© and S.Gombobaatar©

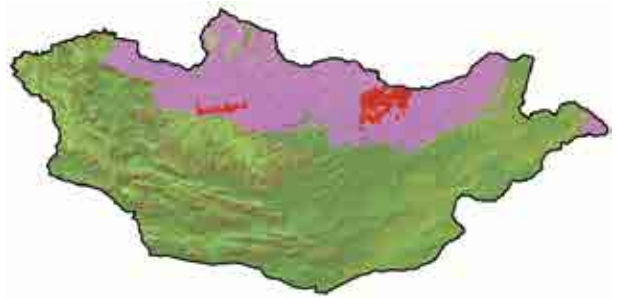


449. White-winged Crossbill

Loxia leucoptera

Adult female.

Photograph by S.Gombobaatar©

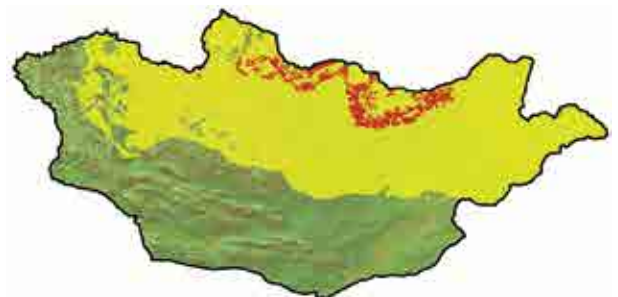


450. Eurasian Bullfinch

Pyrrhula pyrrhula

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



451. Hawfinch

Coccothraustes coccothraustes

Breeding adult male.

Photograph by S.Gombobaatar©



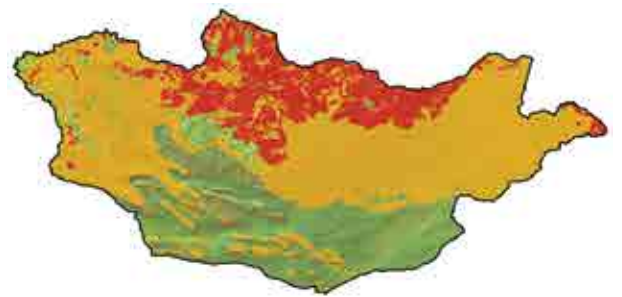
452. Yellow-billed Grosbeak
Eophona migratoria
Adult.

Photograph by S.Gombobaatar©



453. Yellowhammer
Emberiza citrinella
Adult in Germany.

Photograph by Frank Weihe©



454. Pine Bunting
Emberiza leucocephalos
Breeding adult male (left) and adult female
(right).

Photograph by S.Gombobaatar©

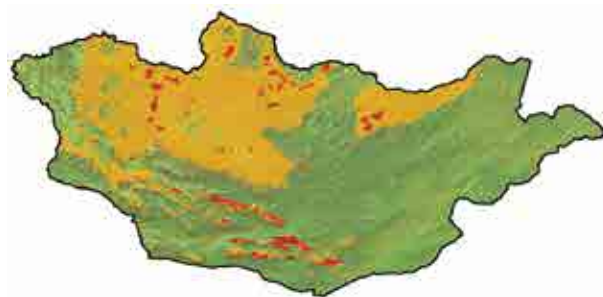


455. Rock Bunting

Emberiza cia

Breeding adult male? in Kazakhstan.

Photograph by Askar Isabekov©

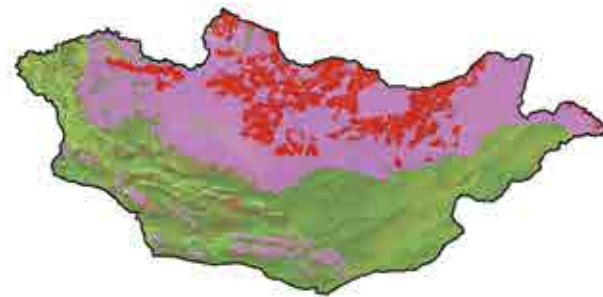


456. Godlewski's Bunting

Emberiza godlewskii

Breeding adult.

Photograph by S.Gombobaatar©



457. Meadow Bunting

Emberiza cioides

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



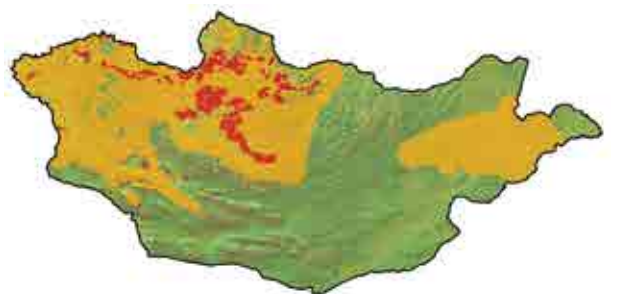
458. Rufous-backed Bunting
Emberiza jankowskii
Adult male.

Photograph by Martin Hale©



459. Grey-necked Bunting
Emberiza buchanani
Breeding adult.

Photograph by S.Gombobaatar©



460. Ortolan Bunting
Emberiza hortulana
Breeding adult.

Photograph by Ch.Uuganbayar©



461. Tristram's Bunting

Emberiza tristrami

Adult male.

Photograph by John Kirk©



462. Chestnut-eared Bunting

Emberiza fucata

Breeding adult male.

Photograph by S.Gombobaatar©

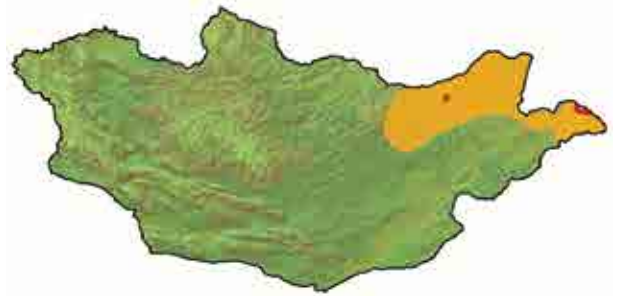


463. Little Bunting

Emberiza pusilla

Breeding adult.

Photograph by S.Gombobaatar©



464. Yellow-browed Bunting

Emberiza chrysophrys

Adult female (above) and first winter male (below).

Photograph by Konishi Hiromi© and Jonathan Martinez©



465. Rustic Bunting

Emberiza rustica

Breeding adult male (left) in Russia and female (right).

Photograph by V.Kurechmar© and S.Gombobaatar©



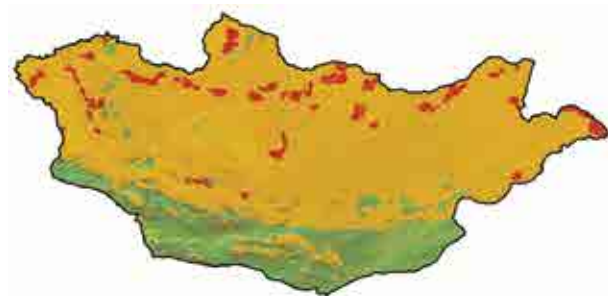
466. Yellow-throated Bunting

Emberiza elegans

Adult male (left) and female (right) in South Korea.

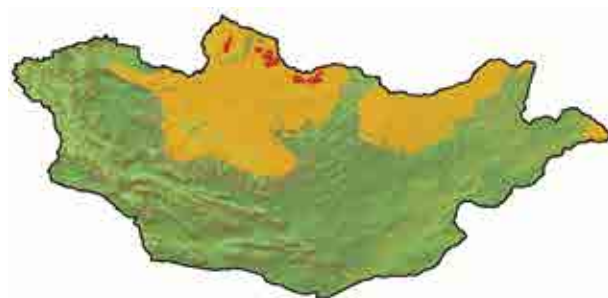
Photograph by S.Gombobaatar©





467. Yellow-breasted Bunting
Emberiza aureola
Breeding adult male (left) and female (right).

Photograph by S.Gombobaatar©



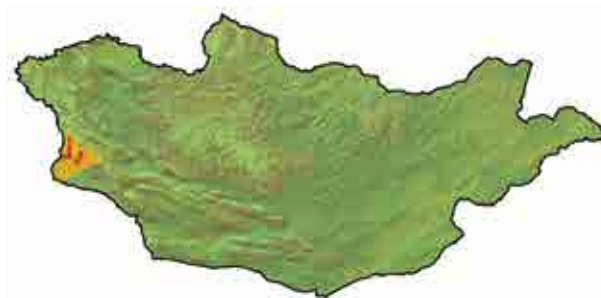
468. Chestnut Bunting
Emberiza rutila
Breeding adult male (below) and female (above).

Photograph by Jin Hwan Choi© and Chang-Yong CHOI©



469. Black-headed Bunting
Emberiza melanocephala
Adult male in India.

Photograph by Jugal Tiwari©

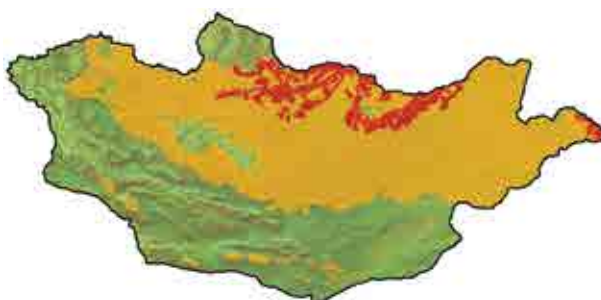


470. Red-headed Bunting

Emberiza bruniceps

First winter male.

Photograph by Chang-Yong CHOI©

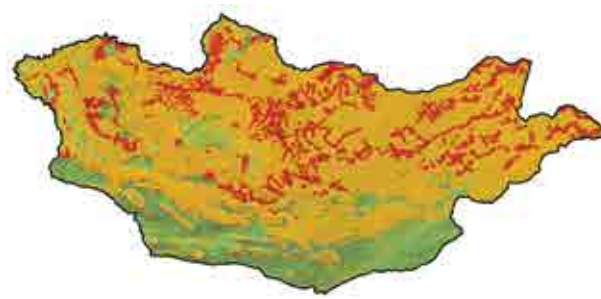


471. Black-faced Bunting

Emberiza spodocephala

Breeding adult male (above) and female (below).

Photograph by S.Gombobaatar©

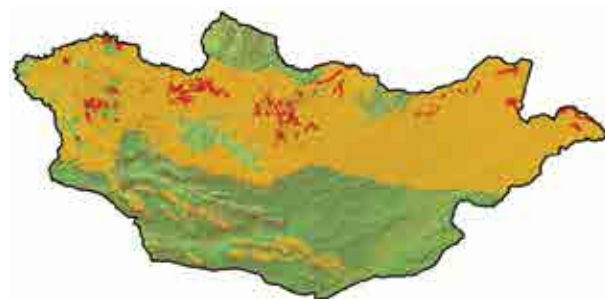


472. Pallas's Bunting

Emberiza pallasi

Breeding adult male (above) and female (below).

Photograph by S.Gombobaatar©



473. Reed Bunting

Emberiza schoeniclus

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



474. Ochre-rumped Bunting

Emberiza yessoensis

Breeding adult male (left) and adult female (right).

Photograph by S.Gombobaatar©



475. Lapland Longspur

Calcarius lapponicus

Adult male (above) and adult female (below).

Photograph by B.Gantulga© and Tom Tams©



476. Snow Bunting

Plectrophenax nivalis

Adult male in non-breeding plumage.

Photograph by Akira Nomura©

