Assessment of the merits of a CMS instrument covering Migratory Raptors in Africa and Eurasia

www.defra.gov.uk

Updated April 2007

defra
Department for Environment
Food and Rural Affairs

Assessment of the merits of a CMS instrument covering Migratory Raptors in Africa and Eurasia

With

Draft MoU and Proposed Action Plan

April 2007

Prepared by
Paul Goriup (NatureBureau Ltd)
Graham Tucker (Ecological Solutions)
With assistance from BirdLife International

For the
Department for Environment, Food and Rural Affairs
Wildlife Species Conservation Division
Zone 1/11C Temple Quay House
Bristol BS1 6EB

The NatureBureau Ltd
36 Kingfisher Court, Hambridge Road
Newbury RG14 5SJ

Department for Environment, Food and Rural Affairs
Nobel House
17 Smith Square
London SW1P 3JR
Telephone 020 7238 6000
Website: www.defra.gov.uk

Published by the Department for Environment,
Food and Rural Affairs

Product code PB12684

Front cover photo credit:
Eleonora's Falcon *(Falco eleonorae)* – copyright 2004, Nick P. Williams – FalconImages.com

Contents

Preface

In 2005, Defra commissioned the NatureBureau to assess whether or not an international agreement to conserve migratory raptors (including owls) should be established under the auspices of the CMS in Africa and Eurasia. That study, together with the status review of migratory raptors underpinning it, was presented to Parties at the 8th CMS Conference in Nairobi (November 2005). Both documents are available at www.cms.int/raptors.

The 2005 study concluded that there was clear cause for concern about the current status of at least 32 species of migratory raptors in Africa and Eurasia. It also found that the situation for most species was not improving over time, and indeed many other species might also be shown to be in an unfavourable status once more detailed studies were carried out in Asia, the Middle East and Africa. Furthermore, the assessment of the provisions of existing applicable MEAs in Africa and Eurasia showed that despite apparently comprehensive coverage, they were failing to conserve migratory raptors largely owing to a lack of focus, resources and coordination.

The results from a consultation exercise for a possible new instrument under the CMS indicated an appreciation of the problems faced by migratory raptors in Africa and Eurasia and the need to take rapid actions. It also demonstrated broad support for the establishment of a non-binding Memorandum of Understanding (MoU) with an Action Plan in order to facilitate urgent concerted actions among Range States to address these problems.

The Conference of Parties endorsed the recommendation from the UK government to pursue the development of an appropriate new instrument for migratory raptors aimed at helping to conserve species and promote sustainable management.

However, some Parties from south and south-east Asia, which had not been covered by the 2005 study, also expressed a keen interest in participating in such an instrument. Defra therefore commissioned a further "rapid assessment" study by the NatureBureau, starting in September 2006 and ending in January 2007, to assess the merits of extending any CMS instrument for raptors to other parts of south, east and south-east Asia.

After reviewing the preliminary results from the extended study, the consultants and Steering Committee came to the conclusion that the conservation issues faced by migratory raptors in the parts of Asia not covered in the 2005 report were not substantially different from those in the rest of Africa and Eurasia. It was therefore decided that instead of producing yet another separate report, it would be more helpful for Parties to update and expand the 2005 report to cover the whole of Africa and Eurasia. This current report is thus provided as a single reference document for future discussions.

Andrew Williams
Chair, Study Steering Committee
Defra Wildlife Species Conservation Division

Acknowledgements

This report was prepared by Paul Goriup (NatureBureau) and Graham Tucker (Ecological Solutions) in collaboration with BirdLife International. Input from BirdLife International was coordinated by Alison Stattersfield and Mike Crosby. Additional technical input and advice from BirdLife International was provided by Mike Evans, Nigel Varty, Stuart Butchart, Mike Crosby, Christine Alder and Lincoln Fishpool.

The study was overseen by a **Steering Committee**, comprising:
Andrew Williams (DEFRA, Chair)
Eric Blencowe (DEFRA)
Nick Williams (DEFRA)
David Stroud (JNCC)
John O'Sullivan (Birdlife International/CMS Scientific Councillor)
Lyle Glowka (CMS Secretariat)

Technical aspects of the study were reviewed by an **Expert Panel**, comprising:
Nigel Collar (BirdLife International/Cambridge University, UK)
Vladimir Galushin (Russian Bird Conservation Union, Russia)
Ian Newton (Centre for Ecology and Hydrology, UK)
Richard Porter (Independent Expert, UK)
Guy Rondeau (West African Raptor Centre, Ivory Coast/Canada)
Philip Round (Mahidol University, and Bird Conservation Society of Thailand)
Rob Simmons (Associate, Percy FitzPatrick Institute of African Ornithology, South Africa)
Matsuyuki Ueta (Japan Bird Research Association)
Rick Watson (Pan-African Raptor Research Programme, Peregrine fund, USA)
Wang Wei, Department of Wildlife Conservation, State Forestry Administration, P.R.China

We thank John Cortes, Dr Anita Gamauf, Dr Andrew Dixon, Mark Duchamp, Jevgeni Shergalin and Dr Attila Bankovics for their comments on consultation drafts of this and the Raptor Status Report covering Africa and Europe. The study team is very grateful to all those who participated in the consultation exercise and generously took the time to submit their valuable comments.

We thank the following **BirdLife International partners and other experts** in Asia for their responses to the threat and status questionnaire: Yeap Chin Aik (Malaysian Nature Society), Hem Sagar Baral (Bird Conservation Nepal), Philip Round (Mahidol University, and Bird Conservation Society of Thailand), Chaiyan Kasorndoarkbu (Thai Raptor Group & Kasetsart University), Mr. Chukiat Nualsri (Nathung Sub-District Administrative Organization, Thailand), Le Manh Hung (Institute of Ecology and Biological Resources/ Vietnam Birdwatching Club), John Pilgrim and Le Trong Trai (BirdLife International – Indochina, for comments on the Vietnam data), Wishnu Sukmantoro (Raptor Indonesia and PILI-NGO Movement), Yat-tung Yu (Hong Kong Bird Watching Society), Quanhui Sun (International Fund for Animal Welfare, Beijing Raptor Rescue Center, China), Professor Ma Ming (China Ornithological Society and Xinjiang Institute of Ecology and Geography), Han Lianxian, Han Ben, Liu Yueqiang, Wang Zijiang and Duan Ziming (Faculty of Conservation Biology, Southwest Forestry University, Kunming Ornithology Association) and Mutsuyuki Ueta (Japan Bird Research Association).

Advice on options for possible CMS instruments for migratory raptors, and financial implications, was kindly provided by the **CMS Secretariat**, in particular Lyle Glowka, and Bert Lenten of the AEWA Secretariat.

The study website was designed and maintained by Helen Dobie and Simon Green at the NatureBureau; Simon Green also coordinated the 2005 consultation exercise.

Abbreviations

AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds.
ASEAN	Association of South East Asian Nations
CITES	Convention on International Trade in Endangered Species
CBD	Convention on Biological Diversity
CMS	(Bonn) Convention on Conservation of Migratory Species of Wild Animals
DEFRA	Department for Environment, Food and Rural Affairs
EC DG	European Commission Directorate General
ETS	European Threat Status, as defined by BirdLife International
EU	European Union
FAO	UN Food and Agriculture Organisation
FCS	Favourable Conservation Status, as defined under CMS
GROMS	Global Register of Migratory Species
IBA	Important Bird Area, as defined by BirdLife International
IGO	Intergovernmental Organisation
IUCN	World Conservation Union (International Union for Conservation of Nature and Natural Resources)
JNCC	Joint Nature Conservation Committee
MEA	Multi-lateral Environmental Agreement
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
SPEC	Species of European Conservation Concern, as defined by BirdLife International
UCS	Unfavourable Conservation Status, as defined under the CMS
WWGBP	World Working Group on Birds of Prey and Owls

1 Summary

Of all groups of birds, the predatory species have always attracted man's special attention for their grace of flight and perceived qualities of speed, agility and strength: even today, eagles and falcons, for example, feature in the national regalia of many countries. Collectively known as *raptors*, birds like eagles, buzzards, hawks, falcons, vultures and owls are characterised by their relatively long lifespans, low reproductive rates and general scarcity – all stemming from their high position in the food web. Unfortunately, these elegant evolutionary adaptations also make raptors particularly vulnerable to rapid changes in their environment.

Ever since the mid-1960s, when peregrine falcon numbers across Eurasia and North America were decimated because of the use of persistent agricultural pesticides that, through their prey, accumulated in their bodies, thinned their egg shells and reduced their breeding success, there has been widespread concern over the status of raptors. In Europe, where monitoring schemes have a long history, many raptors have clearly experienced significant (and in some cases, severe) range contractions and population decreases.

Research has shown that raptors face many threats. The most important derive from intensive land use practices that reduce prey availability and suitable breeding habitat. However, other factors alone or in combination can also negatively affect raptors under various circumstances. These factors include: environmental pollution, pest control poisoning, trophy shooting, capture and trade for falconry, collisions with and electrocution by overhead power-lines, general disturbance, and the looming threats from climate change. Moreover, migratory raptors require adequate networks of suitable habitat along their migration paths, and many species tend to congregate at land-bridges, mountain passes and along coastlines where they are especially prone to intensive hunting and trapping.

The cumulative evidence of national or regional declines of raptors, increasing pressures on their populations, and apparent failings in current conservation measures to redress the situation, led the VI World Conference on Birds of Prey and Owls (Budapest, May 2003) to adopt a resolution proposing the establishment of a new multilateral agreement for the conservation of African-Eurasian migratory raptors, under the auspices of the Bonn Convention on the Conservation of Migratory Species of Wild Animals (Annex 1).

This resolution was taken up by the UK Government's Department for Environment, Food and Rural Affairs (DEFRA), which received support from the CMS Scientific Council in 2004 that a study of the merits of developing a new instrument on raptors should be undertaken, and the results presented at the 8th Conference of Parties, held in Nairobi, 20–25 November 2005.

The overall aim of the study that was subsequently undertaken in 2005 was to "assess whether or not an international agreement to conserve migratory raptors [including owls] should be established under the auspices of the CMS in the Africa and Eurasia". In particular, the study should "examine the merits and drawbacks of a CMS agreement in the region and result in a fully reasoned recommendation on whether or not such an agreement should be established."

On the basis of the results of the 2005 study (see document UNEP/CMS/Inf.8.18), the Conference of Parties adopted UNEP/CMS/Recommendation 8.12 that, among other things, called upon "Parties to the Convention and non-party Range States to consider whether a CMS instrument would better help deliver the sustainable management of migratory raptors and owls and, if so, to participate actively in its development and conclusion with the assistance of the Scientific Council and the Secretariat" (Annex 1).

However, some Parties from south and south-east Asia, which had not been covered in the 2005 study, also expressed a keen interest in participating in such an instrument. Defra therefore commissioned a further "rapid assessment" study by the NatureBureau, starting in September 2006 and ending in January 2007, to assess the merits of extending any CMS instrument for raptors to other parts of south, east and south-east Asia. This report and accompanying draft MoU and proposed Action Plan combines the results from the 2005 study with the rapid assessment study to provide a single overall perspective of the situation in Africa and Eurasia for future discussions.

1.1 Area and Species Covered

The study started by determining which raptors[1] normally occupy Africa and Eurasia, which for the purposes of this study comprises the Palearctic, Indomalayan and Afrotropical biogeographic realms (as defined by Newton 2003). This revealed that 318 raptor species could be considered to occur regularly within the study region. A more detailed assessment was then carried out to identify which of these routinely undertake migratory movements of more than 100 km at some point in their annual cycle, and therefore qualify as true migrants according to the CMS (Annex 2). Of the 318 raptor species in the study region, 81 were considered to be true migrants (Annex 3).

1.2 African-Eurasian Migratory Raptor Status Review

Having established the area and species to be covered, the current status of the species concerned and the threats facing them were reviewed in some depth. This involved consulting recently published literature, interrogating the BirdLife International World Bird Database, and correspondence with an expert panel comprising raptor researchers who had extensive direct experience in Africa and Eurasia.

Firstly, the global threat status of the 318 raptor species within the region was reviewed and compared between migrants and non-migrants and amongst biogeographic realms. This analysis confirmed that of the 81 migratory raptors within the region eight are Globally Threatened and a further four are Near Threatened. Most of these threatened migratory raptor species are intercontinental migrants that breed within the Palearctic. However, this finding might partly reflect inadequate knowledge of the population status of some inter-African and inter-Asian migrants and the migratory behaviour of some threatened species.

Secondly, the regional conservation status of each migratory raptor was reviewed. At this stage, four primarily Australasian species[2], which only have marginal populations within the study region, were excluded from further consideration. In Europe, analysis of the population trends of migratory raptors indicated that nearly a third are declining rapidly: by more than 1% per annum. Furthermore, 21% have suffered large declines averaging over 3% per year in the last 10 years. Sadly, there is very little accurate knowledge about the status of raptor populations (breeding and wintering) in much of Asia, the Middle East and Africa. Although there are numerous counts of raptors at particular sites, it is difficult to assimilate them and deduce likely population trends for most species.

[1] In this report the term "raptor" refers to all birds of prey, including owls, i.e. species in the Orders Falconiformes and Strigiformes.

[2] Nankeen kestrel *(Falco cenchroides)*, Australian hobby *(Falco longipennis)*, swamp harrier *(Circus approximans)* and brown goshawk *(Accipiter fasciatus)*.

Overall, it is apparent that at least 39 African-Eurasian migratory raptor species (51% of the 77 migratory raptor species remaining in the analysis) have an unfavourable conservation status at a global or regional level. Thus, an undesirably high proportion of migratory raptors are facing situations that warrant conservation intervention.

In contrast with some other migratory bird groups already covered by special Bonn Convention instruments (albatrosses, waterfowl, cranes and bustards), migratory raptors as a group have no specific international conservation action plan at present despite all of them being included in Appendix II of the Convention.

1.3 Threats to Migratory Raptor Populations

According to currently available information, it appears that the following are likely to be the key threats to raptor populations in Africa and Eurasia over the coming ten years:

- Habitat loss and degradation (which is the most frequent threat to raptor populations, and is probably the root cause of unfavourable conservation status in most species), in particular habitat loss as a result of agricultural expansion, agricultural intensification, overgrazing of remaining natural grasslands (particularly in Asia, the Middle-East and Africa) and wetland loss.
- Shooting, especially in the Middle-East, for sport and trophies.
- Accidental poisoning (e.g. through the use of poison baits to control feral dogs, jackals and wolves).
- Electrocution by power lines.
- Deliberate persecution (e.g. shooting and destruction of nests to protect game).
- Disturbance during the breeding period (e.g. by tourism, wetland use, forestry and agricultural activities).

Collisions with wind turbines could become a significant future problem as a rapid expansion of wind farms is occurring within raptor migration routes. In the longer term, climate change will pose an additional major threat to migratory raptors and exacerbate existing human induced changes throughout the region because, as habitats and the timing of biological events change, migration strategies may become inadequate.

Of particular importance to migratory raptors are those places where they (and other soaring birds) congregate, usually to minimise a sea-crossing or avoid a high mountain range. An important site in this regard is one where at least 3,000 raptors regularly pass on spring or autumn migration. BirdLife International has identified at least 114 such sites in the study area as part of their inventory of Important Bird Areas. However, the legal security and conservation of many of these sites could be greatly improved: only just over half the sites have any form of protection status and only 20 sites have a good level of protection.

1.4 Potential for a New CMS Instrument for Migratory Raptors

In parallel with the status review, the current international conservation measures established by relevant multi-lateral environmental agreements (MEAs) were examined with specific regard to migratory raptors, and the potential role for a new instrument under CMS evaluated. The strengths, weaknesses, opportunities for and threats to different types of CMS instrument were also analysed.

There are 12 multilateral environmental agreements (MEAs) that have (or could have) significant relevance for the conservation of raptors (whether migratory or resident) and/or their habitats in Africa and Eurasia, namely:

Broad ecosystem/environmental MEAs	Nature conservation MEAs
European Landscape Conservation	EC Birds Directive
Convention on Biological Diversity	EC Habitats Directive
Climate Change Convention	Bern Convention
Convention to Combat Desertification	African Convention
	ASEAN Agreement (not yet in force)
	Ramsar Convention
	CITES
	Bonn Convention

Our review of these MEAs showed that they provide a panoply of interlocking (if not partially overlapping) legislation that, in principle, covers all the threats faced by migratory raptors in Africa and Eurasia. However, it is also apparent that these arrangements are currently not sufficient to prevent declines in migratory raptor populations in Africa and Eurasia mainly because there is a lack of a unifying international plan of action that leads to concerted efforts for their conservation. Only the Bonn Convention provides a mechanism for formulating and implementing such an international plan of action that can coordinate and integrate the application of existing MEAs and address any remaining gaps.

1.5 New CMS Instrument Consultation Exercise

For the 2005 study, a consultation document was prepared (in English and French) that set out the main options and additional opportunities for improving the conservation status of African-Eurasian migratory raptors. The consultation document was distributed among the following interest groups, whose responses were actively solicited:

- Bonn Convention Focal Points (Ministries and government agencies)
- Secretariats of other relevant MEAs
- Researchers
- Non-governmental conservation organisations (NGOs)

This exercise, together with the background documentation, was welcomed by the Bonn Convention Secretariat as an innovative approach for developing new instruments. It elicited 60 responses from a total of 35 range states which, while neither comprehensive nor official, strongly supported the findings of the study, namely that (i) few migratory owls have an unfavourable conservation status at present, but this might change with improved information; (ii) a high proportion of migratory African-Eurasian diurnal raptors have an unsatisfactory conservation status; and (iii) some 90% of the respondents supported the proposition that migratory raptors as a whole would benefit from a new Bonn Convention instrument to improve their conservation status. With regard to the latter finding, the main reasons for not supporting the proposition were based on concerns about diverting attention from implementing existing conventions, and the length of time that it takes to agree new CMS Agreements.

The general preference among respondents (whether official agencies or non-government bodies) on the form of a new instrument was for a non-binding Memorandum of Understanding, accompanied by an Action Plan. The consultation did not seek reasons for preferences but respondents presumably based their judgements on the analysis of strengths, weaknesses, threats and opportunities (SWOT) of different options presented in Table 11. Perhaps the most important advantages of an MoU are its non-binding nature and relatively rapid pace of adoption.

Unfortunately, there was insufficient time in the 2006 study to conduct a similar exercise in Asian countries not covered by the 2005 study. However, as mentioned above, several Asian countries expressed support for a new CMS instrument on migratory raptors in Africa and Eurasia during the 8th Conference of Parties.

1.6 Conclusions and Recommendations

This report provides clear evidence for concern about the current status of at least 39 species of migratory raptors in Africa and Eurasia. Moreover, for most species the situation is not improving over time, and indeed many other species may also be shown to be in an unfavourable status once more detailed studies are carried out in Asia, the Middle-East and Africa.

An assessment of the provisions of existing applicable MEAs showed that despite apparently comprehensive coverage, they were failing to conserve migratory raptors chiefly because of a lack of focus, resources and coordination.

The adoption of UNEP/CMS/Recommendation 8.12 has indicated an appreciation of the problems faced by migratory raptors in Africa and Eurasia, and the need to take rapid actions. It also demonstrated broad support for the establishment of a non-binding Memorandum of Understanding with an Action Plan in order to facilitate urgent concerted actions among Range States to address these problems.

We therefore recommend that a new CMS instrument should take the form of a draft Memorandum of Understanding with an Action Plan that should:

- coordinate and reinforce actions under existing MEAs where appropriate;
- cover all truly migratory raptors (including owls) that regularly occur within Africa and Eurasia, prioritised according to their conservation status;

- apply to the Afrotropical, Indo-Malayan and Palearctic realms, except for the eastern Asian flyway where current information does not suggest a new CMS instrument would bring significant additional conservation benefit;
- focus on key transboundary actions that will address the key threats to migratory raptors;
- promote activities that raise awareness of migratory raptors and their problems;
- monitor raptor populations throughout the region;
- identify regions where actions should be taken, and priorities and responsibilities for their implementation.

We consider that the main problems that a new MoU will face in delivering conservation benefits for raptors are as follows:

- obtaining the necessary number and type of signatory range states to make it operational, bearing in mind some have reservations over their existing burdens;
- implementing the MoU given that it has no formal legal standing or budget and therefore depends for effectiveness entirely on the goodwill of the participating states;
- maintaining a high level of coordination and support given the number of species and wide geographic range since the Secretariat is provided by the Convention Secretariat and the level of input will depend on the resources available to them and other programme priorities;
- possible confusion with the existing AEWA.

It is therefore recommended that, if a future Conference of Parties supports the establishment of a new MoU and Action Plan for Migratory Raptors in Africa and Eurasia, then an *ad hoc* consortium of geographically representative range states should be formed to parent the MoU in consultation with the Convention Secretariat.

Finally, on the assumption that a Memorandum of Understanding and Action Plan along the lines of that proposed in the Attachment to this report is adopted, an estimate of the incremental cost estimation for implementing them over a five year period amounts to US$2,235,000. While this sum is rather higher than for other existing Bonn Convention Memoranda, it should be borne in mind that this one covers by far the greatest number of range states and species (it is more comparable with AEWA). Moreover, in global conservation terms, the amount is quite modest and could be raised through fostering private/public partnerships and by in-kind or offset contributions.

2.1 Background

There is widespread concern over the deteriorating status of many bird species, a high proportion of which now face the risk of global extinction (BirdLife International 2004b, c). In Europe, where good data are available, significant regional range contractions and declines are known to have occurred in recent times (BirdLife International 2004a). Raptors may be particularly at risk because they are generally large, long-lived species with low reproductive rates – characteristics that appear to be associated with high extinction risk (Bennett & Owens 1997). Species with low fecundity are also particularly susceptible to factors that increase their adult mortality rates (Newton 1979). Such species take a long time to recover from losses, which lengthens the period during which fragile populations are exposed to catastrophic chance events. Furthermore, as predators, many raptor species are naturally scarce, which exacerbates their vulnerability to threats.

Raptors do indeed face many threats. The most important derive from intensive land use practices that reduce prey availability and suitable breeding habitat. However, pollution, poisoning, hunting, persecution, illegal taking and trade (e.g. for falconry), collisions with and electrocution by overhead power-lines, and general disturbance all impact on raptors (Thiollay 1994; White *et al.* 1994). Moreover, migratory raptors require adequate networks of suitable habitat along their migration paths, and many species tend to congregate at land-bridges, mountain passes and along coastlines where they are especially prone to intensive hunting and trapping (Zalles & Bildstein 2000).

The cumulative evidence of national or regional declines of raptors, increasing pressures on their populations, and the apparent failings of current conservation measures to redress the situation, has led to calls for better conservation action, especially for the migratory species. As a result, the VI World Conference on Birds of Prey and Owls (convened in Budapest, 18-23 May 2003, by the World Working Group on Birds of Prey and Owls) adopted a resolution (see Annex 1) proposing the establishment of a new multilateral agreement for African-Eurasian migratory raptors, under the Convention on Migratory Species of Wild Animals[3] (CMS).

The WWGBP resolution was subsequently considered by the CMS Scientific Council in 2004, which endorsed a proposal from the UK Government's Department for Environment, Food and Rural Affairs (DEFRA) to conduct a study of the merits of developing a new instrument on raptors. The NatureBureau was commissioned to carry out the study (between January and September 2005), initially covering species that migrate in to Africa from Europe and Asia or that migrate within Africa and Eurasia. The study produced a Raptor Status Report (Tucker & Goriup 2005) and a Final Report with a Draft MOU and Action Plan (Goriup & Tucker 2005); the latter was presented at the 8th Conference of Parties to CMS (Nairobi, November 2005) as document UNEP/CMS/Inf.8.18 (see www.cms.int/species/raptors).

The 8th Conference of Parties adopted UNEP/CMS/Recommendation 8.12 that, among other things, called upon "*Parties to the Convention and non-party Range States to consider whether a CMS instrument would better help deliver these objectives and, if so, to participate actively in its development and conclusion with the assistance of the Scientific Council and the Secretariat*" (Annex 1).

[3] Also known as the Bonn Convention.

In addition, some Parties from south and south-east Asia, which had not been covered by the 2005 study, also expressed interest in participating in such an instrument. DEFRA therefore commissioned a "rapid assessment" study by the NatureBureau, carried out between September 2006 and January 2007, to assess extending a new CMS instrument for raptors to other parts of south, east and south-east Asia.

This report, and the accompanying draft MoU and proposed Action Plan, combines the results from the 2005 study with the rapid assessment study to provide a single overall perspective of the situation in Africa and Eurasia for future discussions.

2.2 Study on the merits of a new CMS instrument for migratory raptors

2.2.1 Overall Aims and Objectives

The overall aim of the study was to assess whether or not an international agreement to conserve migratory raptors (including owls) should be established under the auspices of the CMS in Africa and Eurasia. In particular the study should "examine the merits and drawbacks of a CMS agreement in the region and result in a fully reasoned recommendation on whether or not such an agreement should be established."

The study had the following objectives:

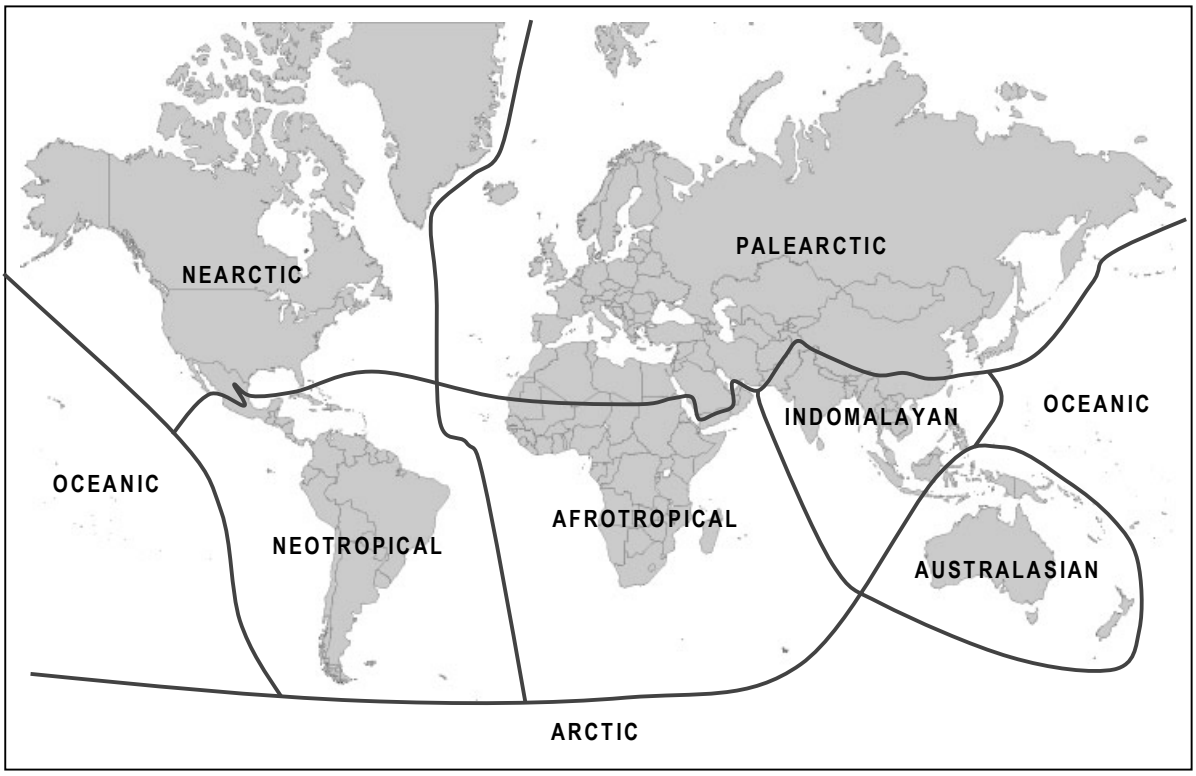
- Identify the threats facing migratory raptors in the region and explain to what extent an international agreement would make a difference in tackling them.
- Assess whether or not there is an appetite for a new agreement, and how this might affect its implementation should one be established.
- Identify the problems an agreement (should it be established) would initially face in delivering a conservation benefit, and how they might be overcome.
- Advise on the general level of financing needed by the agreement, should it be established, to deliver a conservation benefit.
- Explain how an agreement should dovetail with other international agreements established to conserve raptors to ensure synergistic benefits, should it be established.
- If an agreement is to be recommended, draw up a draft version, with an associated Action Plan, explaining the reasons for:
  - it being either a formal Agreement under Article IV.3 or an informal agreement (a Memorandum of Understanding) under Article IV.4 of CMS;
  - species that should be covered and commenting on whether or not other birds of prey, such as owls, should be included;
  - the geographic boundaries of the region that should be covered; and
  - the contents of the Action Plan, which identifies actions that should be undertaken collectively as well as separately by individual countries.

2.2.2 Study Methods

Area and species covered

The study initially considered all raptors that regularly occur at some point in their annual cycle within Africa and Eurasia, which for the purposes of this study comprises the Palearctic, Indo-Malayan and Afrotropical realms, as defined in Newton (2003) and shown in Figure 1.

Figure 1: Biogeographical Realms (after Newton 2003)



The following geographical terminology is used in this report:

- Europe includes the Atlantic archipelagos of the Azores, Madeira, and the Canary Islands, as well as western Russia (east to the Ural mountains and Ural River), Greenland, Svalbard, Iceland, the Faroe Islands, Turkey, Cyprus and the Caucasus states of Georgia, Armenia and Azerbaijan.
- The Middle-East refers to Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Palestinian Authority territories, United Arab Emirates and Yemen.
- Central, southern and eastern Asia refers to all Asian countries other than those that comprise the Middle-East listed above.
- Africa includes Madagascar and the archipelagos of Cape Verde, Comores and Seychelles.

The study did not include New Guinea or other territories within the Australasian realm because few migratory species move beyond the Indo-Malayan Realm, which extends as far south as Timor (Zalles & Bildstein 2000). Also, few birds appear to move north from Australia to New Guinea or Indonesia. However, Zalles and Bildstein (2000) note that the extent to which raptors cross the 140 km-wide Torres Strait between northern Australasia and New Guinea is largely unknown.

In principle, a CMS instrument for raptors should apply to any species that meets the CMS migratory definition i.e. "… *the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries*."

In practice this study was confined to those species listed as "True Migrants" in the Global Register of Migratory Species (GROMS) database. These include partial migrants (species in which only part of the population migrates, with the rest remaining in the breeding areas) but omit those exhibiting "nomadising" or "range extension" behaviour. GROMS "True Migrants" also exclude species that technically meet the CMS migratory species definition because they regularly cross one or more national boundaries, but are only short-distance migrants that travel less than 100 km.

This study follows the taxonomy, scientific nomenclature and English names used by BirdLife International, which serves as the IUCN Red Data Book authority for birds (see http://www.birdlife.org/datazone/species/taxonomy.html).

Raptor status and threat review

Having established the area and species to be covered, the current global and regional status of each migratory raptor species was reviewed by consulting recently published literature, interrogating the BirdLife International World Bird Database, and correspondence with experts who had direct experience in Africa and Eurasia (see Acknowledgements). For the purposes of this study, the CMS definition of unfavourable conservation status (see Annex 2) was treated as equivalent to the threat categories used by BirdLife International for assessing the status of birds globally and regionally. The key threats facing each species with an unfavourable conservation status were then identified. Finally, this information was used to assess and rank the overall importance of each threat to migratory raptors in Africa and Eurasia. Thus, Annex 3 lists all 318 raptor species that occur within the region together with an assessment of their migratory status, global threat status and regional occurrence.

It should be noted, however, that relatively little detailed and up-to-date information appears in the literature on the status of raptors and threats to them outside of Europe. This is particularly the case for parts of Africa and Asia. The 2006 rapid assessment of East Asia therefore attempted to obtain the expert opinion of bird conservationists (especially raptor researchers) in that region. This was done by distributing raptor status and raptor threat questionnaires within the region through BirdLife International partner organisations, representatives and other contacts. These contacts then sent the questionnaires to appropriate conservation and raptor research networks, including the Asian Raptor Research and Conservation Network. The results obtained from the status questionnaires are presented in Annex 8.

Potential for a new CMS instrument for migratory raptors

In parallel with the status review, the current international conservation measures established by relevant multi-lateral environmental agreements (MEAs) were examined with specific regard to migratory raptors, and the potential role for a new instrument under CMS evaluated. The strengths, weaknesses, opportunities for and threats to different types of CMS instrument were also analysed, with the assistance of the Secretariats of the CMS and Agreement on the Conservation of African-Eurasian Waterbirds (AEWA).

New CMS instrument consultation exercise

For the 2005 study, a consultation document was prepared that set out the main options and additional opportunities for improving the conservation status of African-Eurasian migratory raptors. The consultation document, together with the Raptor Status Report, were distributed in April 2005 among the following interest groups, whose responses were actively solicited:

- CMS Focal Points (Ministries and government agencies)
- Secretariats of other relevant MEAs
- Researchers
- Non-governmental conservation organisations (NGOs)

3 Status of Migratory Raptors in Africa and Eurasia

3.1 Introduction

A total of 318 raptor species regularly occur within Africa and Eurasia, as defined for this study in 2.2.2 (see Annex 3). Of these, 81 (70 diurnal species and 11 owls) are considered to be African-Eurasian migrants.

3.2 Globally Threatened Species

According to BirdLife International's World Bird Database (WBDB), as of February 2007 a total of 52 raptor species occurring within Africa and Eurasia are Globally Threatened (i.e. classified as Vulnerable, Endangered or Critical) on the basis of the current IUCN Red List criteria (IUCN 2001). This represents 16.4% of the species complement, and exceeds the proportion, namely 12.4%, of all extant bird species listed as Globally Threatened in 2004 (BirdLife International 2004b). This level of threat seems to run counter to the impression that raptors are more threatened globally than other migratory bird groups. For example, 95% of albatrosses and 60% of cranes are threatened. Nevertheless, 16.4% of raptors classified as Globally Threatened is an undesirably high proportion that warrants conservation intervention. Furthermore, 36 African-Eurasian raptor species (11%) are considered to be Near Threatened by BirdLife International. Unlike albatrosses and cranes, migratory raptors as a group have no specific international conservation action plan at present.

A more detailed breakdown of the global status of raptors in each of the biogeographic realms within Africa and Eurasia is presented in Table 1. This indicates that the proportion of Globally Threatened species is higher amongst non-migratory species than migratory species of the Afrotropical and Indo-Malayan realms. This is particularly obvious for owls: none of the eleven migratory species are Globally Threatened in any realm within Africa and Eurasia. Yet, it has often been claimed (e.g. Owen & Black 1991; Salathe 1991) that migratory species are particularly vulnerable as a result of threats they face on migration. However, the relatively high proportions of threatened non-migratory raptors (and especially owls) may be due to a significant number of them having small ranges, because birds with small ranges tend to be more likely to qualify as Globally Threatened (BirdLife International 2004b). It might also be partly due to a high proportion of Afrotropical and Indo-Malayan owls being restricted to primary tropical forest habitats, which are among the most highly threatened habitats (Groombridge & Jenkins 2002). Thus, if one were to compare species with comparable ranges and habitats, it might turn out that the proportion of Globally Threatened species is indeed higher amongst migratory species than non-migratory species. However, such an analysis was beyond the scope of the present study.

Table 1 also shows that the proportion of Palearctic raptors that are Globally Threatened is lower than in the other realms within Africa and Eurasia. However, it is clear that a relatively high proportion of migratory diurnal raptors in the Palearctic are Globally Threatened and are therefore of particular concern within the region.

Table 1: Numerical analysis of Globally Threatened raptors occurring in Africa and Eurasia

Group/Realm	Afrotropical	Indo-Malayan	Palearctic
All raptors (including owls)			
No. Species	153	195	108
No. Species Globally Threatened	25	28	10
% Species Globally Threatened	16.3%	14.4%	9.3%
Migratory			
No. Species	45	58	67
No. Species Globally Threatened	5	5	7
% Species Globally Threatened	11.1%	8.6%	10.4%
Non-migratory			
No. Species	108	137	41
No. Species Globally Threatened	20	23	3
% Species Globally Threatened	18.5%	16.8%	7.3%
Diurnal raptors			
No. Species	106	116	76
No. Species Globally Threatened	14	17	9
% Species Globally Threatened	13.2%	14.7%	11.8%
Migratory			
No. Species	43	51	56
No. Species Globally Threatened	5	5	7
% Species Globally Threatened	11.6%	9.8%	12.5%
Non-migratory			
No. Species	63	65	20
No. Species Globally Threatened	9	12	2
% Species Globally Threatened	14.3%	18.5%	10.0%
Owls			
No. Species	47	79	32
No. Species Globally Threatened	11	11	1
% Species Globally Threatened	23.4%	13.9%	3.1%

Group/Realm	Afrotropical	Indo-Malayan	Palearctic
Migratory			
No. Species	2	7	11
No. Species Globally Threatened	0	0	0
% Species Globally Threatened	0.0%	0.0%	0.0%
Non-migratory			
No. Species	45	72	21
No. Species Globally Threatened	11	11	1
% Species Globally Threatened	24.4%	15.3%	4.8%

Source. BirdLife International World Bird Database (www.birdlife.org, accessed February 2007)

Further details of the twelve Globally Threatened and Near Threatened migratory raptors of Africa and Eurasia are given in Table 2. Countries where these species regularly occur are listed in Annex 4. Examination of the list shows that most migratory Globally Threatened and Near Threatened raptor species are intercontinental migrants that breed within the Palearctic. However, this finding might partly reflect inadequate knowledge of the population status of some inter-African and inter-Asian migrants and the migratory behaviour of some threatened species.

Table 2: Globally Threatened and Near Threatened migratory raptors of Africa and Eurasia

Note: There are no Globally Threatened or Near Threatened migratory owls in the region
See below for global threat status categories

Species	English Name	Breeding range	Migratory Behaviour	Global Threat Status
Falco naumanni	Lesser Kestrel	SW Europe and N Africa E through E Europe, Asia Minor, Caucasus, Iran, Jordan, Israel, Kazakhstan, S Russia to Mongolia and N China.	Intercontinental: Mainly trans-Saharan migrant, although some birds winter in NW Africa and in various regions of S Europe and S Asia. Most birds migrate to S Africa. Nomadic movements in winter related to local concentrations of insects. Migrates across broad front.	VU
Falco vespertinus	Red-footed Falcon	E Europe and Hungary, E through NC Asia to extreme NW China and upper R Lena	Intercontinental: Travels great distances from Palearctic breeding areas across the Mediterranean and through Africa to S African wintering areas.	NT

Species	English Name	Breeding range	Migratory Behaviour	Global Threat Status
Falco cherrug	Saker Falcon	C and SE Europe, Turkey, Russian Federation, Kazakhstan, Uzbekistan, Turkmenistan, Kyrghistan, Afghanistan, Iran, Iraq, Pakistan, China and Mongolia	Intercontinental: migratory or partially migratory; sedentary or dispersive in S and SW of breeding range. Only occurs in winter in N Pakistan, Arabia, Africa (Sudan, Ethiopia, Niger and N Kenya) and parts of Middle East and China.	EN
Milvus milvus	Red Kite	Nominate race: S Sweden E to Ukraine and S through C Europe to W & C Mediterranean basin, Wales, Caucasus. *M. m. fasciicauda*: Cape Verde Islands.	Mainly migratory in N and C Europe, although increasing tendency to winter in these areas. Populations in S of range and Wales sedentary with varying degree of dispersal of juveniles. The vast majority of migrants winter in S France and especially Iberian Peninsula	NT
Haliaeetus leucoryphus	Pallas's Fish-eagle	C & S Asia, from Kazakhstan to Mongolia and NE China S to Pakistan, N India, Burma and SC China.	Sedentary and dispersive, although mainly migratory in N, particularly where inland waters freeze for long periods. Migrants reach Afghanistan, Iran and formerly Iraq; also very probably to Indian Subcontinent and Burma, where local populations basically sedentary.	VU
Haliaeetus pelagicus	Steller's Sea-eagle	Coastal regions along W Bering Sea, S of St. Paul's Bay and Sea of Okhotsk, winters S to Ussuriland, Japan and Korea.	Chief overwintering areas outside breeding range are in S Primorye Territory, Kuril Is and Sakhalin; many birds overwinter on Hokkaido, particularly on E coast. However, estimated that major part of Kamchatkan sub-population only moves to the southern part of the peninsula.	VU

Species	English Name	Breeding range	Migratory Behaviour	Global Threat Status
Aegypius monachus	Cinereous Vulture	Large range from Spain, Balearic Is and Balkans through Turkey, Caucasus, Iran and Afghanistan to S Siberia, Mongolia, N China and extreme N India.	Partial – mainly intercontinental: In S Europe adults non-migratory, in C Asia semi-resident, often following nomads and their domestic herds. Partly migratory in Asia: most birds leave Mongolia and other N breeding areas for winter; migrants winter from NE Africa and Middle East through N India to Korea; some birds reach Arabia and S China.	NT
Circus maurus	Black Harrier	South Africa and N W Namibia, most in S Cape region.	Partial – intracontinental: Most birds migrate N in winter to dry grassland areas of S Namibia, S Botswana and N and C South Africa.	VU
Circus macrourus	Pallid Harrier	E. European Russia, S Asiatic Russia and N. Kazakhstan E to NW China; irregularly breeds farther N and W.	Intercontinental: Migratory, wintering mainly in sub-Saharan Africa, Indian Subcontinent, Sri Lanka and Burma; rare, or much less common, in Mediterranean Basin, Middle East, Arabia, Iran and S & E China; some birds may remain in S of breeding range. Migrates on broad front.	NT
Aquila clanga	Greater Spotted Eagle	EC Europe E through Russia to S far east, isolated populations in N Iran and NC India.	Intercontinental: winters in S Europe, Middle East, NE Africa and S Asia.	VU
Aquila adalberti	Spanish Imperial Eagle	C, W & S Spain, formerly more widespread, occurring in Portugal and Morocco	Partial: Adults sedentary. Young birds, when independent, disperse from natal areas in all directions and up to 350 km, especially to NW Africa.	VU

Species	English Name	Breeding range	Migratory Behaviour	Global Threat Status
Aquila heliaca	Eastern Imperial Eagle	C Europe and Turkey E through S Russia to Lake Baikal and Mongolia.	Mostly migratory, intercontinental. Birds migrate to S Turkey, Iran, Israel, Syria, Iraq, Egypt, Arabia, and northeast Africa, and to Pakistan, India, Laos and Vietnam.	VU

Sources. Range: Based on Snow and Perrins (1998). Migration behaviour: adapted from GROMS based on del Hoyo et al. (1994). Global Threat: BirdLife International World Bird Database www.birdlife.org (accessed 12 February 2007).

Globally Threatened Status Codes

Code	Category	Definition*
EN	Endangered	Considered to be facing a very high risk of extinction in the wild
VU	Vulnerable	Considered to be facing a high risk of extinction in the wild
NT	Near threatened	Close to qualifying for or is likely to qualify for a threatened category in the near future

*From the IUCN Red List 2004 categories:
see http://www.redlist.org/info/categories_criteria2001.html#categories

3.3 The regional status of migratory raptors

3.3.1 The status of migratory raptors in Europe[4]

The status of birds in Europe is relatively well known as a result of fairly extensive and detailed atlas surveys and monitoring programmes, and two recent pan-European assessments of available data (BirdLife International 2004a; Tucker & Heath 1994). It is thus possible to review the status of raptor populations in detail and with some confidence, although trends in a few species, such as Levant Sparrowhawk *Accipiter brevipes,* still remain rather poorly known.

On the basis of the 1994 assessment, Stroud (2003) noted that a high proportion of European raptors have an unfavourable status in Europe (defined in the publication as being species that are declining, rare or localised). This showed that nearly 80% (30 of 38) of diurnal raptors were in an unfavourable conservation status, whilst almost half of the owls (six of 13 species) were similarly categorised.

[4] See 2.2.2 for geographical definition

In this study, we have reviewed the BirdLife International 2004 assessment of each raptor species, and compared overall population trends between the periods 1970-90 and 1990-2000. The European conservation status and European Threat Status (ETS) of each raptor species is given in Table 6 and Annex 5 and summarised for the group as a whole in Table 3.

BirdLife International defines three categories of Species of European Conservation Concern (SPEC), as follows:

- SPEC 1 – Species of Global Conservation Concern, i.e. classified as Globally Threatened, Near Threatened or Data Deficient (BirdLife International 2004c; IUCN 2004).
- SPEC 2 – Species that are concentrated[5] in Europe and have an unfavourable conservation status.
- SPEC 3 – Species that are not concentrated in Europe but have an unfavourable conservation status.

We consider that the concept of unfavourable conservation status according to BirdLife International is equivalent to the CMS definition (see Annex 2). Thus, a species has an unfavourable conservation status in Europe if its population has any of the following characteristics:

- small and non-marginal;
- declining by more than 1% per year;
- depleted following earlier declines; or
- highly localised.

Depending on the rate of decline, population size and localisation, BirdLife International defines 10 categories of ETS. Seven of these categories include species in unfavourable status, namely: Critically Endangered, Endangered, Vulnerable, Declining, Rare, Depleted, and Localised. A species may be considered to be in a favourable status in three categories: Secure, Data Deficient or Not Evaluated.

[5] i.e. more than 50% of its global breeding or wintering population or range occurs in Europe.

Table 3: The European conservation status of migratory raptors

SPEC = Species of European Conservation Concern.
See Table 6 and Annex 5 for details of the status of individual species.

	Migratory raptors		All European species	
SPEC Category	**Number**	**%**	**Number**	**%**
1	8	17.0%	40	7.6%
2	5	10.6%	45	8.5%
3	16	31.9%	141	26.8%
Total SPEC	**29**	**61.7%**	**226**	**43.0%**
Non-SPEC	18	38.3%	300	57.0%
TOTAL	47		526	
European Threat Status				
Critical (CR)	1	2.1%	9	1.7%
Endangered (EN)	6	12.8%	20	3.8%
Vulnerable (VU)	5	10.6%	38	7.2%
Declining (D)	4	8.5%	62	11.8%
Rare (R)	9	19.1%	33	6.3%
Depleted (H)	4	8.5%	51	9.7%
Other (localised, data deficient, not evaluated)	0	–	12	2.3%
Secure (S)	18	38.3%	301[6]	57.2%

Source: BirdLife International (2004a)

A comparison of the proportion of European migratory raptors that fall into each SPEC and ETS category with the overall European avifauna clearly indicates that they have a particularly high proportion with an unfavourable status in Europe: some 62% of migratory raptors have an unfavourable conservation status compared to 43% of all 526 regularly occurring European bird species. Furthermore, 12 (25%) of these are in high threat categories, with one Critical (pallid scops-owl *Otus brucei*), six Endangered and five Vulnerable.

[6] The total for Non-SPECs does not equal the total for Secure species in Europe because the Pygmy Cormorant *Phalacrocorax pygmeus* is Near Threatened globally but is considered to have a Secure population in Europe.

An assessment of population trends in the European populations of migratory raptors (Table 4) also indicates that nearly a third are declining by more than 1% per annum. Furthermore, 21% have suffered large declines averaging over 3% per year in the last 10 years. Although this is a slightly lower percentage of species showing large declines than over the 1970-90 period, the proportion of species showing moderate declines has increased, and the overall proportion of species that have undergone moderate or large declines is unchanged. Thus, there has been relatively little improvement in the status of European raptor populations since 1990.

Table 4: Population trends in European migratory raptors

	% of raptors (n = 47) in trend class	
Trend*[1]	**1970–1990**	**1990–2000**
Large increase (≥3 % per year)	15%	6%
Moderate increase (1-3% per year)	8%	13%
Small increase*[2] (<1% per year)	na	6%
Stable*[3]	40%	23%
Small decline*[2] (<1% per year)	na	6%
Moderate decline (1-3% per year)	2%	10%
Large decline (≥3 per year)	29%	21%
Fluctuating	0%	8%
Unknown	4%	4%
Total % in moderate or large decline	31%	31%

Sources. 1970-1990 trends: Tucker and Heath (1994). 1990-2000 trends: BirdLife International (2004a).
Notes:
*1 Based on worst case scenario calculation taking into account the effects of calculations using minimum and maximum population estimates.
*2 This trend category was not distinguished in 1994.
*3 Only distinguished if <10% decline and <10% increase, and worst-case and best-case scenario trends are in opposite directions.

3.3.2 The status of migratory raptors in the Middle-East[7]

Intensive surveys and monitoring of diurnal raptor migration has been undertaken in some parts of the Middle-East, especially in Israel for several decades. These surveys have established population counts for several species that are difficult to census on their breeding grounds, such as Levant sparrowhawk (*Accipiter brevipes*). They have also built up a considerable amount of data on migrant numbers, which have recently been analysed for trends (e.g. see Shirihai *et al.* 2000 for review). These counts have noted sharp declines in lesser spotted eagle (*Aquila pomarina*) and steppe eagle (*Aquila nipalensis*) that accord with observed declines in Europe, and suggest that declines may have also occurred in Asia.

[7] See 2.2.2 for geographical definition

Unfortunately, information on the status and trends of breeding populations in the Middle-East is very fragmentary and incomplete. As in Africa and elsewhere in Asia, few countries in the region have prepared bird atlases or established bird monitoring schemes. Recoveries have been documented of some species' populations since the widespread reduction of use of persistent pesticides. But the status of most species is currently unknown or uncertain.

3.3.3 The status of migratory raptors in Africa[8]

There is very little knowledge of the status of raptor populations (breeding and wintering) in much of Africa. Although there are numerous counts of raptors at certain sites, it is difficult to assimilate them and deduce likely population trends in most species. Although some bird distribution atlases have been produced they have mostly yet to be repeated, and where monitoring schemes have been established most have not been undertaken for long enough to establish trends over a meaningful period. Detailed studies have been carried out in parts of South Africa (e.g. Tarboton & Allan 1984), or from atlas surveys (e.g. Harrison *et al.* 1997) or from road counts (e.g. Herremans & Herremans-Tonnoeyr 2001) where population trends have been established for breeding species and some highly aggregated wintering populations, e.g. lesser kestrel (*Falco naumanni*). There are also some trend data available for parts of West Africa, where Thiollay (2006a; 2006b) has repeated roadside counts some 30 years later to measure population changes. But care needs to be taken in extrapolating trends from such relatively well studied, but small-scale, areas to other parts of Africa. Nevertheless, observed declines are a cause for concern and, in accordance with the precautionary principle, justify the need for conservation actions now.

In general, the data from Africa support some observed declines in breeding populations of some Palearctic migrants, but they are not sufficient to reliably assess the status of most intra-African migrants. Nevertheless, there is evidence of declines in some species, including tawny eagle (*Aquila rapax*), African swallow-tailed kite (*Chelictinia riocourii*) and the Globally Threatened black harrier (*Circus maurus*) (BirdLife International 2004c; Curtis *et al.* 2004; del Hoyo *et al.* 1994; Ferguson-Lees & Christie 2001; Harrison *et al.* 1997).

3.3.4 The status of migratory raptors in Asia (outside the Middle-East)[8]

In parts of Asia, detailed studies have been carried out of some species of high conservation importance, such as saker falcon (*Falco cherrug*) (Galushin & Moseikin 2000; Galushin 2004; Gott *et al.* 2000; Levin *et al.* 2000; Shijirmaa *et al.* 2000). But the status of most species is very poorly understood in most areas. Although there has been a recent increase in the monitoring of raptors and raptor migration in parts of the region, such as by the Asian Raptor Research and Conservation Network (http://www5b.biglobe.ne.jp/~raptor/), the datasets are mostly too recent and sparse to ascertain trends at the moment.

[8] See 2.2.2 for geographical definition

Our rapid assessment of raptors in south and east Asia attempted to supplement the readily available published literature on raptor populations through the distribution of a simple status questionnaire to raptor scientists and conservationists in the region (see 2.2.2 for details). The responses to the status questionnaire are summarised in Annex 8. Responses were received from seven countries: China (three areas), Indonesia, Japan, Malaysia, Nepal, Thailand (three responses) and Vietnam. Thus, although some of south-east Asia was reasonably well covered, there were large gaps in coverage, including India and Russia and the responses from China only covered parts of the country. Therefore, to avoid biases from the questionnaire data, the assessment of the status of raptor populations in this report takes into account the extent to which each species' range and core populations are covered by the questionnaire responses. Thus, overall status assessments for Asia are based on our best judgement from a combination of questionnaire responses, published information and expert opinions.

We found that it was not possible within the scope of the rapid assessment period to elucidate reliably the status of many migratory raptor populations in East Asia. Despite this, the data we had, particularly for the species that use East Asian Flyway show that they generally breed in eastern Siberia, Kamchatka, north-eastern China, the Korean Peninsula and Japan and travel south into continental south-east Asia and its associated archipelagos (see Figure 1). Many travel on a broad front, but some follow one of three major north-south flyways: the eastern inlnd, the coast Pacific and the oceanic Pacific, which together comprise the east Asian flyway (McClure 1998)

More generally across all of Asia, we found that most species which are known or suspected to be in unfavourable conservation status (including some Globally Threatened or Near Threatened species, such as pallid harrier (Circus macrourus), saker falcon (Falco cherrug) and probably imperial eagle (Aquila heliaca) are Palearctic breeders which migrate south west to Iran, the Arabian Peninsula and Africa or south into the Indian sub-continent or south west to China, e.g. Pallas fish-eagle (Haliaeetus leucoryphus) and some harriers. The most important exception to this pattern is Steller's sea-eagle (Haliaeetus pelagicus), which is globally threatened species and is certainly declining. However, it is a relatively short-distance migrant that primarily occurs in a small range (mainly in parts of Russia and Japan)

3.4 Conclusion

An overall summary of the assessment of the status of African-Eurasian migratory raptor populations in Europe, Asia, the Middle-East and Africa is provided in Table 5. Table 6 summarises the status of each of the 39 migratory raptor species that have an unfavourable conservation status in the African-Eurasian region. These are species that are Globally Threatened and/or have an unfavourable status in one or more of the assessed regions (i.e. Africa, the Middle-East, Europe and Asia). Annex 5 lists the remaining migratory raptor species in Africa and Eurasia (i.e. species with a favourable or uncertain conservation status in Africa and Eurasia).

Table 5: The status of breeding populations of migratory raptors in Europe, Asia, the Middle-East and Africa

Conservation Status (CMS definition)	Europe	Asia*1	Middle East	Africa
Unfavourable	18	9	1	4
Unfavourable (uncertain)*2	11	5	1	2
Total unfavourable	**29**	**14**	**2**	**6**
Favourable	8	4	0	0
Favourable (uncertain)	10	9	4	8
Unknown	0	34	11	17
Total migratory raptors	*47*	*61*	*17*	*31*

Notes

*1 Excluding countries in the Middle East.

*2 This is defined for Europe as species that have a provisional European Threat Status and are not globally threatened.

Table 6: The global and regional status of breeding populations of migratory raptors in Africa and Eurasia with an unfavourable conservation status

Key

Global Status	CR = Critical EN = Endangered VU = Vulnerable NT = Near Threatened LC = Least Concern
European Species of Conservation Concern (SPEC)	SPEC 1 = Species of Global Conservation Concern (i.e. classified as Globally Threatened, Near Threatened or Data Deficient) SPEC 2 = Species that are concentrated in Europe and have an unfavourable conservation status; SPEC 3 = Species that are not concentrated in Europe but have an unfavourable conservation status. Status refers to breeding population.
b	Breeding population
m	only occurs on migration
w	occurs in winter (non-breeding season) and on migration
wss	wintering population in sub-Sahara
European Threat Status	CR = Critical EN = Endangered VU = Vulnerable D = Declining R = Rare H = Depleted S = Secure Codes in brackets indicate that the assessment is provisional
FCS	Favourable Conservation Status (see Annex 2 for definition)
UCS	Unfavourable Conservation Status (see Annex 2 for definition)
UCS qualifying criteria for Africa, Asia and the Middle East	d = declining in numbers or range r = rare or depleted population h = threatened by habitat loss
?	Unknown status, or uncertain status if combined with UCS or FCS
?(d-e)	Some evidence of declines in south and east Asia (see Annex 8), but insufficient data are available over the majority of the species' range to ascertain its overall status

Species	English Name	Global Status	European SPEC	ETS	Asia*	M-E	Africa	Refs
Falco naumanni	Lesser Kestrel	VU	1	H	?	UCSr	w	1,2
Falco tinnunculus	Common Kestrel	LC	3	D	FC?	?	?	
Falco vespertinus	Red-footed Falcon	NT	3*1	(VU)	?	m	w	
Falco eleonorae	Eleonora's Falcon	LC	2	D	–	m	b? w	
Falco biarmicus	Lanner Falcon	LC	3	VU	–	FC?	UCSd?	5,7
Falco cherrug	Saker Falcon	EN	1	EN	UCSd	w	w	2,3
Falco rusticolus	Gyrfalcon	LC	3	(R)	?	–	–	
Pandion haliaetus	Osprey	LC	3	R	ND?	UCS?	FC?	
Pernis ptilorhyncus	Oriental Honey-buzzard	LC	m	m	UCSd?	m	–	
Chelictinia riocourii	African Swallow-tailed Kite	LC	–	–	–	–	UCSd	7
Milvus milvus	Red Kite	NT	2*1	D	–	–	UCSr	
Milvus migrans	Black Kite	LC	3	(VU)	UCSd?	FC?	UCSd?	7
Milvus lineatus	Black-eared Kite	LC	–	–	UCSd	–	–	
Haliaeetus leucoryphus	Pallas's Fish-eagle	VU	–	–	UCSd	–	–	1,2
Haliaeetus albicilla	White-tailed Eagle	LC	1*1	R	FC?	?	–	1
Haliaeetus pelagicus	Steller's Sea-eagle	VU	–	–	UCSd	–	–	1,2
Neophron percnopterus	Egyptian Vulture	LC	3	EN	?	FC?	?	
Aegypius monachus	Cinereous Vulture	NT	1	R	UCSd	w	w	1,2
Circaetus gallicus	Short-toed Snake-eagle	LC	3	(R)	?	?	b? wss	
Circus spilonotus	Eastern Marsh-harrier	LC	–	–	UCSd	–	–	

Species	English Name	Global Status	European SPEC	ETS	Asia*	M-E	Africa	Refs
Circus maurus	Black Harrier	VU	-	-	-	-	UCSrh	1,4
Circus cyaneus	Northern Harrier	LC	3	H	?	w	w	
Circus macrourus	Pallid Harrier	NT	1	(EN)	UCSd?	w	w	1,9
Accipiter brevipes	Levant Sparrowhawk	LC	2	(VU)	FC?	m	w	
Butastur indicus	Grey-faced Buzzard	LC	-	-	UCSd	-	-	10
Buteo rufinus	Long-legged Buzzard	LC	3	(VU)	?	?	?	
Buteo hemilasius	Upland Buzzard	LC	-	-	UCSd?	-	-	
Aquila pomarina	Lesser Spotted Eagle	LC	2	(D)	UCSd?	m	w	6
Aquila clanga	Greater Spotted Eagle	VU	1	EN	UCSd?	w	w	1,2
Aquila rapax-	Tawny Eagle	LC	-	-	-	?	UCSd	5,7,8
Aquila nipalensis	Steppe Eagle	LC	3	(EN)	UCSd	w	w	6
Aquila adalberti	Spanish Imperial Eagle	VU	1	(VU)	-	-	w	
Aquila heliaca	Eastern Imperial Eagle	VU	1	R	UCSd	w	w	1,2
Aquila chrysaetos	Golden Eagle	LC	3	R	?(d-e)	?	?	
Hieraaetus pennatus	Booted Eagle	LC	3	(R)	?(d-e)	m	b? w	
Otus brucei	Pallid Scops-owl	LC	3	CR	?	?	-	
Otus scops	Common Scops-owl	LC	2	(H)	?	m	b? w	
Nyctea scandiaca	Snowy Owl	LC	3	(R)	?	-	-	
Asio flammeus	Short-eared Owl	LC	3	(H)	?	w	w	

Sources. Global Threat Status: BirdLife International World Bird Database (www.birdlife.org, accessed 20 June 2005). European Threat Status: BirdLife International (2004c).

Other regions – general: del Hoyo et al. (1994, 1999), Ferguson-Lees et al. (2001). Specific species references (see table code): 1 BirdLife International (2004c); 2 BirdLife (2001); 3 Galushin (2004); 4 Curtis et al. (2004); 5 Barnes (2000); 6 Shirihai et al. (2000); 7 Thiollay (in press); 8 Simmons & Brown (2005); 9 Galushin et al. (2003); 10 Ueta (2006).

Notes

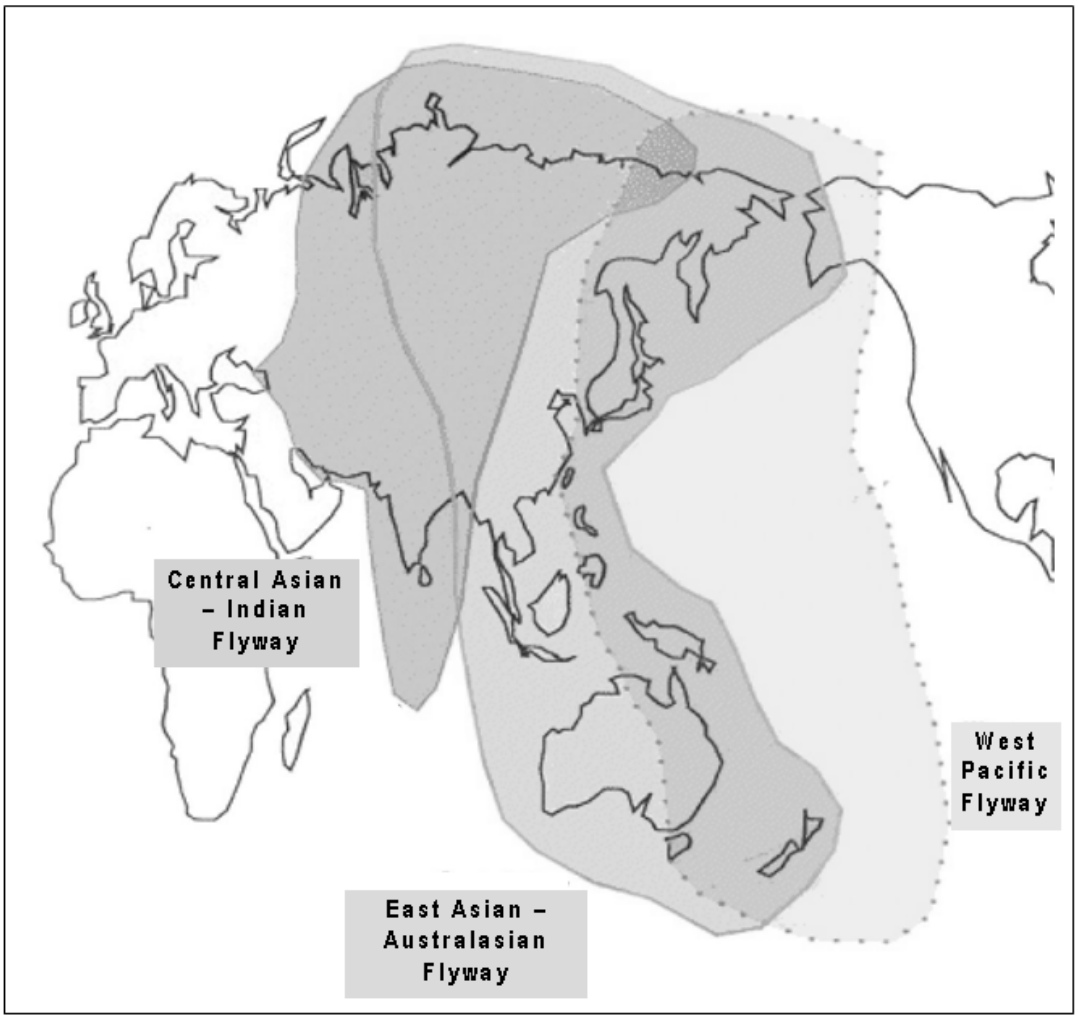
*Excluding countries in the Middle East. *1 Global status changed since publication of BirdLife International 2004c.

Despite the data limitations discussed above, it is clear that a very large proportion (51%) of African-Eurasian species of migratory raptor have an unfavourable conservation status at a global or regional level, and 12 of these are Globally Threatened or Near Threatened. Furthermore, a high proportion of these species are in continued long-term or rapid population declines.

Although the status of many species is uncertain in Africa, the Middle-East and Asia, two-thirds of the species (i.e. 26) listed in Table 6 qualify as having an unfavourable conservation status on the basis of their well documented global threat status or other reliable information in at least one region. There is therefore a high level of justification for taking action for each of these species.

On the other hand, the data also clearly indicate that further surveys and monitoring programmes are needed over much of Africa, the Middle-East and Asia before the conservation status of many species can be reliably ascertained. Further surveys and monitoring should therefore be a major component of any action plan for raptors, and especially owls, in these regions.

Figure 2: Bird Migration Flyways in Central and Eastern Eurasia



However, in respect of Asia, the scientific information on migratory raptors in the eastern flyway, even after receiving some additional data from local experts, is insufficient to conclude that there is merit in extending a new CMS instrument to this area. On the contrary, apart from Steller's sea-eagle, there appear to be no locally occurring migratory raptors in a poor conservation status, and threats to those arriving from the Palearctic seem to be low-level and diffuse.

Accordingly, it is concluded that the range states in the eastern flyway should not be included in an new CMS instrument until new evidence shows otherwise. However, Steller's sea-eagle should be included in the new CMS instrument for those range states where it occurs.

4.1 General overview

There are many well-known and documented threats to raptors in Africa and Eurasia (e.g. Chancellor & Meyburg 1998; Meyburg & Chancellor 1989, 1994; Newton & Chancellor 1985; Salathe 1991; Thiollay 1994; Tucker & Evans 1997; Tucker & Goriup 2005; Tucker & Heath 1994; White et al. 1994; Zalles & Bildstein 2000). In this section, we have tried to establish which threats appear to have the most significant detrimental effects on species populations, especially those with an unfavourable conservation status (see previous section). We have also attempted to distinguish between threats that apply to species while breeding and during migration/wintering to establish which species are subject to impacts at an international scale, and would therefore benefit from concerted international conservation actions.

Being mostly long-lived species with generally low annual productivity and slow maturity, raptors are particularly vulnerable to any threats that may increase mortality rates. However, although there is much general information on habitat loss and pollution, and many documented cases of persecution e.g. from hunting, there are few demographic studies (e.g. Newton 1979) that have established their effects on mortality and productivity rates, and hence overall population level impacts. Furthermore, where such studies have been carried out, the results may not be widely applicable to other regions and habitats. And in some cases threats may have changed since the studies were carried out. For example, many studies have documented the impacts of toxic pesticides on raptors through egg-shell thinning. But the levels of such pesticides have since declined substantially in most areas, and previous studies may therefore be of little value in predicting future trends.

There is also a paucity of published information on threats to migratory raptors in Asia, the Middle East and Africa. Therefore, the assessment of threats to species in these regions should be treated with caution, because we have only considered documented threats, rather than those that we suspect occur. The assessment of threats to raptors in central, south and east Asia is largely based on responses to the threat questionnaire that was distributed to raptor scientists and other bird conservationists in the region by BirdLife International (see 2.2.2 for details).

The identified threats are coded according to the primary threat categories used by BirdLife International, which is based on the IUCN Authority File for threat types (see www.redlist.org), and defined sub-categories that are relevant to raptors in the region. Table 7 lists for each species the threats that we have identified as probably having a significant population impact, and a summary of their overall importance to raptors is presented in Table 8.

Table 7: Threats to migratory raptors of Africa and Eurasia that have Unfavourable Conservation Status

GS = Global status: [see Table 2 for codes].

S = Season: **B** = breeding; **N** (shaded) = non-breeding (migration and wintering areas).

Habitat Loss/Degradation: **ai** = loss to agriculture & agricultural intensification; **aa** = abandonment; **og** = over-grazing; **fm** = forest management and loss; **af** = afforestation (e.g. Eucalyptus, Poplar and conifer plantations); **w** = wetland loss and degradation; **b** = burning/ fire; **dv** = developments (e.g. housing, industrial and infrastructure).

Taking (i.e. harvesting/hunting): **t** = trapping and trade (zoos, collections, falconry); **e** = egg-collection; **s** = shooting for sport.

Accidental mortality: **c**= collision; **e** = electrocution on power lines; **p** = poisoning; **nd** = nest destruction by agricultural machinery.

Per = Persecution (i.e. control of predators/pests) including deliberate poisoning.

Pollution (affecting habitat and/or species): **l** = Land pollution (other than pesticides); **w** = water pollution (other than pesticides); **p** = pesticides (i.e. direct and secondary toxicity effects, not indirect effects through food availability).

Dist = Disturbance (human).

Other: **av** = invasive alien vegetation; **ls** = lead-shot poisoning through ingestion of prey with high lead content; **ns** = nest site loss in old buildings; **de** = desertification from drought and over exploitation of wood; **ip** = introduced predators (e.g. rats and cats); **pd** = prey disease, i.e. myxomatosis and other diseases in rabbits.

				Habitat loss/degradation								Taking			Accidents				Per	Pollution			Dist	Other	Refs
Species	**English Name**	**GS**	**S**	**ai**	**aa**	**og**	**fm**	**af**	**w**	**b**	**dv**	**t**	**e**	**s**	**c**	**e**	**p**	**nd**		**l**	**w**	**p**			
Falco naumanni	Lesser Kestrel	VU	B	x	x			x			x		x	x										ns	1a, 34
			N	x		x																			6, 7
Falco tinnunculus	Common Kestrel	LC	B	x										x		x									
			N									x		x										de	
Falco vespertinus	Red-footed Falcon	NT	B	x					x													x			
			N	x					x					x											6
Falco eleonorae	Eleonora's Falcon	LC	B																				x	ip	27
			N																						
Falco biarmicus	Lanner Falcon	LC	B	x								x	x						x				x		28
			N									x					x								16, 20
Falco cherrug	Saker Falcon	EN	B	x	x			x				x	x			x			x			x			2, 9, 19, 25, 26, 29, 30, 34-38
			N									x													
Falco rusticolus	Gyrfalcon	LC	B									x	x						x				x		
			N																						
Pandion haliaetus	Osprey	LC	B				x		x				x		x				x		x	x	x		32
			N											x	x				x		x	x			
Pernis ptilorhyncus	Oriental Honey-buzzard	LC	B	x	x		x				x												x		
			N	x			x					x		x											40
Chelictinia riocourii	African Swallow-tailed Kite	LC	B	x		x																x		de	
			N	x		x																x		de	
Milvus milvus	Red Kite	NT	B	x	x												x		x			x	x		10, 31
			N	x	x												x		x			x		ls	10, 31

				Habitat loss/degradation								Taking			Accidents				Per	Pollution			Dist	Other	Refs
Species	**English Name**	**GS**	**S**	**ai**	**aa**	**og**	**fm**	**af**	**w**	**b**	**dv**	**t**	**e**	**s**	**c**	**e**	**p**	**nd**		**l**	**w**	**p**			
Milvus migrans	Black Kite	LC	B	x	x				x						x	x			x	x		x	x		
			N											x			x			x		x			
Milvus lineatus	Black-eared Kite	LC	B	x			x			x	x	x							x						
			N	x								x							x						
Haliaeetus leucoryphus	Pallas's Fish-eagle	VU	B				x		x		x	x		x		x	x		x		x	x	x		34, 41
			N						x			x		x			x				x		x		
Haliaeetus albicilla	White-tailed Eagle	LC	B						x				x		x		x		x		x	x	x		3
			N												x						x	x			
Haliaeetus pelagicus	Steller's Sea-eagle	VU	B				x					x		x					x	x	x		x	ls	34
			N							x											x				
Neophron percnopterus	Egyptian Vulture	LC	B														x		x						
			N											x			x								
Aegypius monachus	Cinereous Vulture	NT	B	x	x	x		x		x	x	x					x					x			1b, 34, 41
			N											x			x								16
Circaetus gallicus	Short-toed Snake-eagle	LC	B	x	x			x		x						x			x				x		
			N											x											
Circus spilonotus	Eastern Marsh Harrier	LC	B	x					x												x		x		
			N						x	x		x		x			x				x	x	x		
Circus maurus	Black Harrier	VU	B	x						x												x	x	av	4, 21
			N																						
Circus cyaneus	Northern Harrier	LC	B	x				x	x	x									x						17
			N																						
Circus macrourus	Pallid Harrier	NT	B	x	x	x			x								x		x			x			33
			N	x		x								x								x		de	5, 6, 33

				Habitat loss/degradation								Taking			Accidents				Per	Pollution			Dist	Other	Refs
Species	**English Name**	**GS**	**S**	**ai**	**aa**	**og**	**fm**	**af**	**w**	**b**	**dv**	**t**	**e**	**s**	**c**	**e**	**p**	**nd**		**l**	**w**	**p**			
Accipiter brevipes	Levant Sparrowhawk	LC	B	x																					
			N	x																					18
Butastur indicus	Grey-faced Buzzard	LC	B	x	x			x	x														x		42
			N						x			x		x			x					x			
Buteo rufinus	Long-legged Buzzard	LC	B	x												x	x		x				x		
			N											x			x								
Buteo hemilasius	Upland Buzz ard	LC	B	x		x					x											x			
			N	x		x																x			
Aquila pomarina	Lesser Spotted Eagle	LC	B	x	x		x	x	x					x					x				x		22
			N	x																					16, 18, 20, 22, 23
Aquila clanga	Greater Spotted Eagle	VU	B				x	x	x					x			x		x				x		24
			N											x											24
Aquila rapax	Tawny Eagle	LC	B	x		x											x					x		de	5, 20
			N	x										x			x					x		de	5, 20
Aquila nipalensis	Steppe Eagle	LC	B	x												x			x			x	x		8,18, 25, 26
			N	x													x		x			x			20, 41
Aquila adalberti	Spanish Imperial Eagle	VU	B	x				x								x	x		x	x		x	x	ls,pd	1d, 12, 13
			N																						
Aquila heliaca	Eastern Imperial Eagle	VU	B	x			x	x				x				x	x		x				x		1c
			N			x								x			x					x			38, 39, 41
Aquila chrysaetos	Golden Eagle	LC	B					x	x				x			x	x		x						11,14,15
			N												x		x								
Hieraaetus pennatus	Booted Eagle	LC	B	x			x			x						x			x			x			

				Habitat loss/degradation								Taking			Accidents				Per	Pollution			Dist	Other	Refs
Species	**English Name**	**GS**	**S**	**ai**	**aa**	**og**	**fm**	**af**	**w**	**b**	**dv**	**t**	**e**	**s**	**c**	**e**	**p**	**nd**		**l**	**w**	**p**			
			N											x			x					x			6
Otus brucei	Pallid Scops-owl	LC	B																						
			N																						
Otus scops	Common Scops-owl	LC	B	x																		x			
			N																						
Nyctea scandiaca	Snowy Owl	LC	B																				x		
			N																						
Asio flammeus	Short-eared Owl	LC	B	x				x	x																
			N																						

Sources. General: BirdLife International (2004c); Brown, Urban & Newman (1982), del Hoyo *et al.* (1994, 1999), Ferguson-Lees *et al.* (2001); Tucker & Heath (1994); Tucker & Evans (1997).
Specific species references: 1a Biber (1996); 1b Heredia (1996a); 1c Heredia (1996b); 1d Gonzalez (1996); 2(Barton 2002); 3 Krone (2003); 4 Harrison *et al.* (1997); 5 Barnes (2000); 6 Thiollay (1989); 7 Pepler (1996); 8 Flint *et al.* 1983, Lopushkov 1988; 9 Galushin (2004); 10 Mateo *et al.* (2003); 11 Whitfield *et al.* (2001); 12 Pain *et al.* (2005); 13 Ferrer (2003); 14 Watson (1992); 15 Marquis, Ratcliffe & Roxburgh (1985); 16 Shirihai *et al.* (2000); 17 Tucker (2003); 18 Zalles & Bildstein (2000); 19 Chancellor & Meyburg (1998); 20a Hartley *et al.* (1996); 20b Hartley (1998); 21 Curtis *et al.* (2004); 22 Meyburg *et al.* (1999b); 23 Meyburg *et al.* (1995) 24 Meyburg *et al.* (1999a); 25 Fox (2004); 26 Batdelger & Potapov (2002); 27 Ristow (1999); 28 Gustin *et al.* (1990); 29 Karyakin *et al.* (2004); 30 Gombobaator *et al.* (2004); 31 Ntampakis & Carter (2005); 32 Saurola (1997); 33 Galushin *et al.* (2003); 34 BirdLife (2001); 35 Ming et al. (2006); 36 Ming (1999); 37 Ming (2004); 38 Ming (2001b); 39 Ming (2000); 40 van Balen (1998); 41 Ming (2001a); 42 Ueta et al. (2006).

Table 8: Summary of threats to migratory raptors in Africa and Eurasia that have an Unfavourable Conservation Status

Key. Magnitude of impacts: **L**ow = unlikely to cause detectable population impacts in most species; **M**oderate = likely to cause local population impacts in most species, or population declines in some species; **H**igh = likely to cause population declines in most species. Blank = threat currently unknown in region.

Threat type (primary and secondary types)	Species impacted*[1]		Magnitude of impacts*[2]			
	Breeding	Non-breeding	Europe	Asia*[3]	Middle-East	Africa
Habitat Loss/Degradation						
• Loss to agriculture & agricultural intensification	28	12	H	H	M?	H
• Abandonment	10	1	M	M	?	–
• Over-grazing	5	5	L	M?	M?	H?
• Forest loss & management	9	1	M	M	L	M
• Afforestation	12	0	M	–	–	–
• Wetland loss and degradation	13	4	M	H	H	M
• Burning/fire	6	2	M	L	–	M
• Developments	6	0	M	M	M	–
Taking of birds (harvesting/hunting)						
• Trade (collections, falconry)	8	8	L	M	M	L
• Egg-collection	7	0	L	L	L	–
• Shooting and trapping	6	17	M	L?	H	L
Accidental mortality*[4]						
• Collision with man-made structures	3	3	L	L	L	L
• Electrocution on power lines	11	0	M	H	L	L
• Poisoning (e.g. by baits for other species)	12	14	L	M	M	L (H in parts)
• Nest destruction	0	0	L	L	–	L
Persecution	22	4	L	M	M	L
Pollution						
• Land pollution*[5]	3	1	L	L	L	–
• Water pollution*[5]	5	5	L	M	L	L
• Toxic pesticides	17	13	L	M?	M?	M?

Threat type (primary and secondary types)	Species impacted*1		Magnitude of impacts*2			
	Breeding	Non-breeding	Europe	Asia*3	Middle-East	Africa
Disturbance (human)	21	2	H	L	M	M
Other	7	5				

Notes: *1 From Table 7. *2 A subjective assessment for the next 10 years, taking into account each threat's average extent, severity and predicted trends across all African-Eurasian migratory raptor species listed in Table 7. *3 Excluding countries in the Middle-East. *4 Individuals are killed accidentally (but see Pollution where this may also be the case) rather than intentionally (see Hunting, Persecution). *5 Other than pesticides.

Our overall assessment, according to currently available information, is that the following are likely to be the key threats to raptors over the coming ten years:

- Habitat loss and degradation (which is the most frequent threat to raptor populations, and is probably the root cause of unfavourable conservation status in most species), in particular habitat loss as a result of agricultural expansion, agricultural intensification, overgrazing of remaining natural grasslands (in Asia, the Middle-East and Africa) and wetland loss.
- Shooting of migrating raptors, especially in the Middle-East, for sport and trophies.
- Accidental poisoning (e.g. through the use of poison baits to control feral dogs, jackals and wolves).
- Electrocution by power lines.
- Deliberate persecution of raptors (e.g. shooting and destruction of nests to protect game).
- Disturbance of breeding birds (e.g. as a result of tourism, wetland use, forestry and agricultural activities).

Collisions with wind turbines could also be a significant future problem as a rapid expansion of wind farms is occurring in some regions and many of these are likely to be situated within raptor migration routes.

In the longer term, climate change will pose an additional burden on migratory raptors and exacerbate existing human induced changes throughout the region. The Inter-governmental Panel on Climate Change has stated that the warming of the global climate system is now "unequivocal", and furthermore "most of the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentration" (IPCC 2007). Although the impacts of this climate change on the world's ecosystems and habitats, and associated species remain uncertain, it is likely that migratory species will be particularly vulnerable because as habitats and the timing of biological events change these birds' migration strategies and timings may become less well adapted to their environment. It is therefore appropriate to take a precautionary approach and assume that their migratory strategies will be negatively affected.

4.2 Threats to key sites

For over 25 years, BirdLife International has been developing a global programme of identifying Important Bird Areas (IBAs), which are sites of particular importance for birds, that should therefore be subject to some degree of conservation management (including designation as protected areas). The original European criteria for identifying IBAs (Grimmett & Jones 1989) have been updated and expanded for global application. IBAs are now sites that are important for threatened species, congregatory species, assemblages of restricted-range species and assemblages of biome-restricted species.

Sites qualify as IBAs if they meet any of the standard global (Class A) criteria or regionally specific (Class B) criteria (Heath & Evans 2000).

Of particular importance to migratory raptors are those IBAs which are "bottleneck" sites where they (and other soaring birds) congregate to bypass a particular obstacle, often to minimise a sea-crossing or avoid a high mountain range. An IBA bottleneck site where at least 20,000 storks, raptors, or cranes pass during spring or autumn migration qualifies as being of global importance; or it would have European (or regional) importance if over 5,000 storks, or over 3,000 raptors or cranes regularly pass on spring or autumn migration.

Annex 6 contains a list of all IBAs identified by BirdLife International for Europe, the Middle-East, Africa and Asia that qualify as bottleneck migration sites of global or regional importance for raptors according to the above criteria. Those that also hold significant numbers of Globally Threatened raptors on passage are also indicated. This list of 114 sites should, however, be treated as a minimum list of internationally important areas requiring protection for migratory raptors. Other sites of equal or greater importance may be discovered with further knowledge (particularly in Asia), and appropriate protection measures will also be required for nationally and regionally important sites.

However, as the summary of IBA protected status given in Table 9 shows, the legal security and conservation of many of these sites could be greatly improved: only just over half the sites have any form of protection status. In Europe, Africa and the Middle-East, only 20 sites have a good level of protection (assuming that where legal protection is apparently afforded, it is actual rather than just a paper designation).

Table 9: Summary of the protection status of IBAs in Africa and Eurasia that are significant for migratory raptors

(see Annex 6 for individual site data)

IBAs in Europe, Africa and the Middle-East		
Site protection level	**Percentage of 100 sites**	
	National protection	**International protection**
High	20%	9%
Partial	29%	13%
Low	9%	2%
None	42%	76%
IBAs in Asia (Percentage of 14 sites)		
Protected	43%	
Partially protected	36%	
Unprotected	21%	

Note: * Levels and types of protection are not consistently distinguished in IBA data for Asia.

5 Existing International Conservation Measures Applicable to African-Eurasian Migratory Raptors

5.1 Overview

There are twelve multilateral environmental agreements (MEAs) that have (or could have) significant relevance for the conservation of raptors (whether migratory or resident) and/or their habitats in Africa and Eurasia (see Annex 7 and summary in Table 10). They can be broadly divided into those which deal with broad ecosystem or environmental themes, and those that are more closely focused on conservation of habitats and/or species, as follows:

Broad ecosystem/environmental MEAs	Nature conservation MEAs
European Landscape Conservation	EC Birds Directive
Convention on Biological Diversity	EC Habitats Directive
Climate Change Convention	Bern Convention
Convention to Combat Desertification	African Convention
	ASEAN Agreement (not in force)
	Ramsar Convention
	CITES
	Bonn Convention

A detailed review of the provisions of the two EC Directives, the Bern Convention, CITES and the Bonn Convention with respect to European raptors has recently been published by Stroud (2003). This paper, together with the presentation of the provisions of existing MEAs in Annex 7, shows that a panoply of interlocking (if not partially overlapping) legislation already exists that, in principle, covers all the threats faced by migratory raptors in Africa and Eurasia – although the Bonn Convention alone has a provision that can address problems arising from accidental mortality.

Yet clearly, for many species, the current arrangements appear to be either inadequate or simply failing. The reasons for this can be attributed to the widely recognised drawbacks of much international conservation law, including:

- lack of resources (manpower, capacity, information and cash);
- lack of focus;
- absence of key range states;
- difficulties with enforcement;
- poor cross-compliance and coordination; and
- difficulty of undertaking trans-national initiatives.

5.2 Options for Improving Conservation Benefit

Taking the above issues into account, the main strategic approaches to addressing the unfavourable conservation status of migratory raptors in Africa and Eurasia can be determined as:

1. Wait and see whether the situation improves as existing legislation gradually gathers pace in Europe (under the EC Directives as the Natura 2000 network expands and receives management support from the European Agricultural Fund for Rural Development; Bern Convention; and Convention on Biological Diversity), and in Africa (under the Convention on Biological Diversity; revised African Convention; Convention to Combat Desertification; and Climate Change Convention).

2. Strengthen the existing legislation in terms of the drawbacks mentioned above, especially by acquiring more Parties (particularly Russia, Ukraine, Belarus, Kazakhstan and other Central Asian countries and more African and Middle Eastern members for the Bern Convention), generating higher political commitment for conservation priorities, and seeking ways to improve enforcement of protection under national law.

3. Set up a new instrument under CMS focusing on these species and particular priority actions. Only this option actually provides a mechanism for formulating and implementing a unifying international plan of action for conserving migratory raptors in Africa and Eurasia.

These options were explored in more detail, and the views of key interest groups sought, during a stakeholder consultation exercise undertaken in 2005, which is described in the following section.

Table 10: Summary of the applicable MEAs compared with the main threats facing African-Eurasian raptors

See Annex 7 for further details

Applicable MEAs	**Threat Type** (see Table 7 for more details)						
	Habitat loss/ degradation (human induced)	**Taking of birds** (harvesting/ hunting)	**Accidental mortality**	**Control of predators/ persecution** (including deliberate poisoning)	**Pollution** (affecting habitat and/ or species)	**Disturbance** (human)	**Climate Change**
Convention on Biological Diversity	National and regional biodiversity strategies and action plans address habitat protection and restoration Signatories must carry out EIAs for projects that may have a significant effect on biodiversity.	Regulates access to genetic resources (e.g. taking falcons for breeding purposes)	EIAs would address some issues, e.g. wind farms.		EIAs would address some issues		
Climate Change Convention (with Kyoto Protocol)	Establishment of carbon "sinks" through forest and grassland expansion		Encourages wind farms that may be sited in areas used by migratory birds				Signatories to Kyoto Protocol aim to cut greenhouse-gas emissions by at least 5% from 1990 levels between 2008 and 2012.
Convention to Combat Desertification	National and sub-regional action plans prepared to prevent desertification, with a focus on Africa						
CITES		Establishes a well-enforced licensing system for all raptors in international trade or transfers					

Applicable MEAs	**Threat Type** (see Table 7 for more details)						
	Habitat loss/ degradation (human induced)	**Taking of birds** (harvesting/ hunting)	**Accidental mortality**	**Control of predators/ persecution** (including deliberate poisoning)	**Pollution** (affecting habitat and/ or species)	**Disturbance** (human)	**Climate Change**
European Landscape Conservation	When fully operating, could foster landscape-scale habitat protection and restoration in Europe						
Convention on Migratory Species	Requires Signatories to protect areas important for listed migratory species, either directly or under a subsidiary instrument	Prohibits or regulates the taking of listed species	Signatories should prevent, remove, compensate for or minimise, as appropriate, the adverse effects of activities that seriously impede or prevent migration	Calls for any necessary emergency procedures that would rapidly reduce significant threats to migratory species	Calls for any necessary emergency procedures that would rapidly reduce significant threats to migratory species	Signatories should prevent, remove, compensate for or minimise, as appropriate, the adverse effects of activities that seriously impede or prevent migration	Signatories should address all threats to Appendix I species, and work is in hand on how climate change may affect species in this Appendix and CMS Agreements
Ramsar Convention	Provides good protection for wetlands included in the Ramsar List which now form a considerable network in African-Eurasian flyway and thus benefits raptors that use wetland areas				Ramsar Secretariat to be informed of any deterioration of a listed wetland as a result of pollution		
Bern Convention	Urges states to protect areas important for migratory species and is creating an "Emerald Network" of sites across Europe	Strictly protects birds (including their eggs and nests), and prohibits capture, killing and trade in live or dead birds		Deliberate poisoning of raptors prohibited		Signatories should take measures to prevent deliberate disturbance to raptors	

Applicable MEAs	**Threat Type** (see Table 7 for more details)						
	Habitat loss/ degradation (human induced)	**Taking of birds** (harvesting/ hunting)	**Accidental mortality**	**Control of predators/ persecution** (including deliberate poisoning)	**Pollution** (affecting habitat and/ or species)	**Disturbance** (human)	**Climate Change**
African Convention[9]	Requires Signatories to set up a system of conservation areas covering the range of ecosystems in the country	Taking permitted only under special licence and any subse-quent export is regulated		Certain methods of killing and taking prohibited	Specific measures to be taken to prevent pollution of waters		
ASEAN Agreement[10]	Requires Signatories to set up a system of conservation areas covering the range of ecosystems in the country	Taking permitted only under special licence. Listed species of raptor strictly protected.			Encourages Signatories to prevent or control polluting discharges or emissions that may have a harmful effect on natural processes and the functioning of natural ecosystems (air, soil, freshwater, or marine).		
EC Habitats Directive	EU members are obliged to identify Special Areas of Conservation for key habitat types in proportion to their territory that together form a network known as Natura 2000				Member states should prevent impacts that cause damage to or deterioration of SACs		

[9] *In July 2003, in Mozambique, the members of the African Union adopted a revised text of the African Convention to bring it more in line with recent international conventions such as CBD. It also defines different types of conservation areas. It will enter in to force with the accession of the 15th party at the time of writing this had not been achieved.

[10] Not in force but has several signatories.

Applicable MEAs	**Threat Type** (see Table 7 for more details)						
	Habitat loss/ degradation (human induced)	**Taking of birds** (harvesting/ hunting)	**Accidental mortality**	**Control of predators/ persecution** (including deliberate poisoning)	**Pollution** (affecting habitat and/ or species)	**Disturbance** (human)	**Climate Change**
EC Birds Directive	EU members are obliged to identify Special Protection Areas for key bird habitats; these are also included in Natura 2000 (see above)	Strictly protects birds (including their eggs and nests), and prohibits capture, killing and trade in live or dead birds		Deliberate poisoning of raptors prohibited	Member states should prevent impacts that cause damage to or deterioration of SPAs	Strictly protects birds (including their eggs and nests) from disturbance especially during breeding season	

6 Consultation Exercise on a New CMS Instrument for Migratory Raptors in Africa and Eurasia

6.1 Introduction

In the two phases of the study, consultation exercises were undertaken with a wide range of key interest groups. The first was carried out during April and May 2005 for the African-Eurasian region and was mainly concerned with investigating the support for and scope of a new CMS instrument on migratory raptors. The second survey, during November and December 2006 covering South and East Asia, was mainly aimed at eliciting information on status and threats (see Section 3).

In the 2005 survey, a consultation document was circulated (in English and French) that contained an overview of the study aims, the main conclusions from the draft status review (including a proposal made at the time to exclude owls from any possible new CMS instrument), and a summary of the existing MEAs with provisions applicable to African-Eurasian raptors, together with possible options for improving the conservation actions in particular for migratory raptors (see 5.2). Given the study was particularly seeking views on the merits and desirability of a possible new CMS instrument for migratory raptors, a description of the various types of CMS instruments was also provided and a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of them undertaken (see below). The survey sought to obtain at least 50 responses, of which at least 20 came from ministries or government agencies with a good geographic coverage and hosting a significant number of the species covered.

6.2 Types of CMS Instrument and SWOT Analysis

In general, compared with other MEAs, a CMS instrument has a number of distinctive features and advantages, such as:

- focusing attention on a discrete set of migratory species within a given geographic area;
- specifying and engaging the range states most appropriate for these species;
- the management/action plan associated with a CMS instrument can more easily facilitate joint action (including by drawing together the existing legislation), information exchange and integration, and best practice development across the geographical area of the instrument; and
- providing the possibility for better access to other types of assistance, including other biodiversity-related conventions and international organisations, and integration into the entire world of environment and development.

However, there are also disadvantages that have to be borne in mind, including:

- the additional administrative and financial burden for under-resourced environmental ministries, even when actions are closely correlated with obligations under other MEAs;
- the considerable time likely to be needed to negotiate, adopt and ratify a new instrument and for the first meeting of Signatories to convene and actually pursue an agreed action plan; and
- continued reliance on national conservation priorities.

There are four types of CMS instruments for cooperative actions. In increasing order of complexity, these are:

(1) stand-alone Action Plans;

(2) Memoranda of Understanding

(3) Article IV(4) agreements that can cover any migratory population in any specified geographic range of one or more species (even ones not listed in Annex II of CMS); and

(4) Article IV(3) Agreements that must cover the whole range of one or more species listed in Annex II of CMS.

A further possibility in respect of this study was:

(5) to expand the coverage of the existing Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) to cover raptors (or indeed all migratory birds) using this flyway.

Since all migratory raptors are listed on Appendix II of CMS, any of these instruments may be used for developing concerted international actions for their conservation. Indeed, over time, it is possible to start with a relatively simple instrument and gradually increase its legal standing.

Table 11 provides a review of the strengths, weaknesses, opportunities and threats (SWOT analysis) of each type of instrument.

Table 11: Strengths, weaknesses, opportunities and threats (SWOT) of potential CMS instruments for migratory raptors

Type of CMS Instrument	Main Characteristics	Strengths	Weaknesses	Opportunities	Threats
1. Action Plan	A non-binding stand-alone instrument that can be recommended by the Conference of Parties to the Ranges States of a migratory species listed in Appendix I so that they take further measures considered appropriate to benefit the species under Article III(6).	• Can be developed quickly with little formal procedure (no need for signatures by the participating agencies). • Enjoys the international authority of the CMS with its institutional umbrella as a body provided by the United Nations Environ-ment Programme (UNEP). • Provides a stable and long-term legal and/or political framework for initial implementation and later evolu-tion (e.g. to MoU or Agreement). • There are no regular administrative duties or financial contributions to be paid: the administrative work is usually done by the CMS Secretariat.	• No legal standing and therefore depends for effectiveness entirely on the goodwill of the participating states. • No organisational structure created for implementation so the CMS Secretariat has to coordinate it.	• The material for an Action Plan is readily available and any Range State willing to participate could do so quickly. • The Action Plan could serve as a forerunner for an MoU and eventually a new Agreement, or possible adoption under an expanded AEWA.	• Signatories to CMS will not provide the Secretariat with the additional resources needed to service the Action Plan. • Participants in the Action Plan will not give sufficient support because it is not legally binding.

Type of CMS Instrument	Main Characteristics	Strengths	Weaknesses	Opportunities	Threats
2. Memorandum of Understanding	A non-binding instrument that aims to co-ordinate existing short-term measures across the range of one or more seriously endangered migratory species. It initiates immediate concerted action measures until a more elaborate instrument (i.e. an Article IV agreement) is prepared and adopted by the Range States.	• Can be developed and agreed on relatively short notice • Enjoys the international authority of the CMS with its institutional umbrella as a body provided by the United Nations Environment Programme (UNEP). • Provides a stable and long-term legal and/or political framework for initial implementation and later evolution. • There are no regular admini-strative duties or financial contributions to be paid: the administrative work is usually done by the CMS Secretariat. • Has a higher standing than an Action Plan alone because it requires Mini-sterial (or equivalent) signatures, and embodies political commitments, but does not need ratification. • Their simplicity allows them (and/or their associated action plans) to be fairly easily re-opened for re-negotiation or amendment.	• No legal standing and therefore depends for effectiveness entirely on the goodwill of the participating states. • No organisational structure created for implementation so the CMS Secretariat has to coordinate it. • Typically has a much less substantive content than an Agreement because it must not create any new commitment for the signatory Range States. • As an MoU does not create any organisational structure of its own, it is arguably not as dynamically implemented as would be an Agreement.	• The material for an MoU and Action Plan is readily available and any Range State willing to participate could do so provided the government signs the MoU. • The MoU could serve as a forerunner a new Agreement, or possibly amalgamation with an expanded AEWA.	• Signatories to CMS will not provide the Secretariat with the additional resources needed to service the MoU and Action Plan. • Signatories to the MoU will not give sufficient support because it is not legally binding. • The MoU itself could provide a poor substitute for a higher level Agreement.

Type of CMS Instrument	Main Characteristics	Strengths*	Weaknesses*	Opportunities	Threats
3. Article IV(4) agreement	Article IV(4) agreements may take the form of legally binding multilateral treaties or Memoranda of Understanding*. They may be concluded for any population, members of which periodically cross one or more national boundaries but their geographical coverage does not need to extend to the entire migratory range of the species concerned. Moreover, the species covered do not have to be listed in Appendix II of CMS.	• A self-standing treaty with its own institutions for implementing an Action Plan. • The legally binding nature of this instrument could unlock resources that would not be released for an Action Plan or MoU. • Decision and policy making bodies, serviced by a Secretariat, meet on a regular basis. • Has the potential to create a dynamic environ-ment to address the particular needs of the species covered, and Range States. • Provides long term legal stability for the Range States, their authorities and scientific bodies, as well as the international community of governmental and non-governmental organisations involved. • Signatories must make regular reports on implementation. • Has flexibility in coverage of species and geographic range, and can develop organically from an MoU.	• Needs to be ratified in accordance with the internal law making or decision making procedures of every Range State. This can take consider-able time. • The legal and institutional framework of the Agreement means the Signatories may have to stretch limited re-sources to a further MEA requiring regular contributions and national personnel for meetings and reporting.	• The material for an agreement and Action Plan is readily available and any Range State willing to be-come a Party could do so provided it ratifies the Agreement. • The agreement could focus on the most threatened raptors and key range states in order to mini-mise delays and costs. • The agreement could be amalgamated later with an expanded AEWA if appropriate.	• Signatories to the Agreement might not contribute sufficient resources to make it effective as an independent instrument.

*See previous row for Memorandum of Understanding option

Type of CMS Instrument	Main Characteristics	Strengths	Weaknesses	Opportunities	Threats
4. Article IV(3) Agreement	• Article IV(3) Agreements are viewed as formal, multi-lateral treaties. They may create new conservation or financial obligations for their Contracting Parties. To enter into force these instruments need to be ratified or acceded to by a pre-determined number of Range States. This instrument applies to species listed in Appendix II of CMS. Parties within whose territory Appendix II migratory species occur shall endeavour to conclude Article IV(3) Agreements, following the guidelines set out in Article V.	• A self-standing treaty with its own institutions for implementing an Action Plan. • The legally binding nature of this instrument could unlock resources that would not be released for an Action Plan or MoU. • Decision and policy making bodies, serviced by a Secretariat, meet on a regular basis. • Has the potential to create a dynamic environ-ment to address the particular needs of the species covered, and Range States. • Provides long term legal stability for the Range States, their authorities and scientific bodies, as well as the international community of governmental and non-governmental organisations involved. • Parties must make regular reports on implementation. • Has a high legal standing, especially for CMS Parties, as a requirement for Annex II species (i.e. raptors).	• Needs to be ratified in accordance with the internal law making or decision making procedures of every Range State. This can take consider-able time. • The legal and institutional framework of the Agreement means the Parties may have to stretch limited re-sources to a further MEA requiring regular contributions and national personnel for meetings and reporting. • The Agreement should cover the whole geographic range of the species covered so the number of eligible Parties can grow very large.	• The material for an Agreement and Action Plan is readily available and any Range State willing to become a Party could do so provided it ratifies the Agreement. • The Agreement would enjoy the highest level of legal standing. • The Agreement would embrace all raptors and relevant Range States.	• The large number of Parties involved would mean a considerable period before the Agreement enters in to force. • Parties to the Agreement might not contribute sufficient resources to make it effective as an independent instrument.

Type of CMS Instrument	Main Characteristics	Strengths	Weaknesses	Opportunities	Threats
5. Expansion of Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)	This is an Agreement under Article IV(3) of CMS that came into force in 1999. It covers 235 species in 117 Range States, of which 48 are currently Signatories. The Signatories take co-ordinated measures to maintain migratory waterbird species in a favourable conservation status or to restore them to such a status. They apply within the limits of their national jurisdiction a range of prescribed measures as well as specific actions determined in the Action Plan of the Agreement.	• An already existing and operational Agreement, requiring rela-tively few additional resources to cover raptors. • Covers the same geographic range as needed for African-Eurasian raptors. • No need for Signatories to adopt a new treaty and has economies of scale. • Many threats to waterbirds similar to those faced by raptors e.g. climate change, wind farms, pollution.	• Will potentially require a lengthy process of amendment and ratification by at least two-thirds (i.e. 32) of the existing Signatories. • The first realistic opportunity to propose such an amendment would be for the Fourth Meeting of Signatories in 2008. • Could reduce the focus on waterbirds while not generating strong action for raptors.	• The material for a raptor Action Plan is readily available and could be integrated with the existing AEWA Action Plan. • If the Signatories to AEWA agree to expand its scope then this would fast-track concerted international action for raptors. • The additional costs for including raptors in an expanded AEWA would be much less than creating a new Agreement.	• An expanded AEWA could attenuate specific actions for particular groups and have to rely on more generic actions.

6.3 Survey Results and Analysis

By the time the 2005 consultation exercise closed on 10 May 2005, 60 responses had been received from 35 range states.

6.3.1 Status of African-Eurasian migratory raptors

The first two questions in the 2005 consultation exercise sought feedback about raptor species known to have an unfavourable conservation status. The results were:

Question	Yes (%)
Do you agree with the general conclusion of the raptor status report that few migratory owls have an unfavourable conservation status at present?*	89
Do you agree with the general conclusion of the status report that a high proportion of migratory raptors[11] have an unfavourable conservation status at present?	98

* subsequently published by Defra: see Tucker and Goriup, 2005

[11] In the consultation exercise the term "raptor" was used to refer to diurnal raptors only.

Many respondents who did not agree with the first proposition sent comments to support their view that there was insufficient information to justify excluding owls from any new CMS instrument. In addition, several respondents believed other African raptors might also be found to be either migratory and/or have unfavourable status if more recent data were available.

6.3.2 Desirability of a CMS instrument for migratory raptors

The 2005 survey posed the question:
Do you believe that a new international instrument under CMS covering migratory raptors would lead to improved conservation action for those species having an unfavourable conservation status?

Some 90% of the respondents supported the proposition. Of the remaining 10% who did not favour a new CMS instrument for migratory raptors, only 3% represented ministries or government agencies. The main reasons for not supporting the proposition concerned problems with implementing existing conventions, and therefore the addition of a further instrument would be of little value and could even deflect actions from existing agreements. Furthermore, the length of time that it takes to agree new CMS Agreements was also a concern for some respondents.

Those respondents who favoured a new CMS instrument were asked to rank the options set out in 6.2 in order of preference. The overall results for first preference for all respondents are given in Table 12. This indicates that an MoU was the overall first choice for a new CMS instrument.

Table 12: The number of times each CMS option was ranked of highest importance

Ranking	Action Plan only	MoU	IV(4) Agreement	IV(3) Agreement	AEWA expansion
1st preference	8	15	8	7	11
Only option proposed	0	1	0	3	1
Total	8	16	8	10	12

Analysis of the overall scores (i.e. taking into account average perceived importance of all options) also indicated a fairly clear preference for an MoU (Table 13). Furthermore, this preference was consistent amongst respondents from ministries/government agencies and NGOs/researchers/others (Table 14). It is notable that there appeared to be particularly low support for the preparation of either a IV(4) or IV(3) Agreement amongst ministry/government agency respondents.

Table 13: Overall scores for each CMS instrument option and ranking

Ranking	Action Plan only	MoU	IV(4) Agreement	IV(3) Agreement	AEWA expansion
1	8	15	8	7	11
2	9	8	7	9	10
3	9	9	11	11	7
4	6	11	10	10	6
5	13	4	11	9	13
Sum (excluding missing scores)	142	122	150	143	141
Valid Responses*[1]	45	47	47	46	47
Ratio of sum : valid responses	3.16	2.60	3.19	3.11	3.00
Rank (1 = highest preference)	**4**	**1**	**5**	**3**	**2**

*1 Excluding scores from respondents that did not rank all options.

Table 14: Option scores for each CMS instrument according to organisation type

Organisation type	Action Plan only	MoU	IV(4) Agreement	IV(3) Agreement	AEWA expansion
Ministry/government agency	3.18	2.42	3.16	3.28	2.74
Rank (1 = highest preference)	**4**	**1**	**3**	**5**	**2**
NGO, research and other	3.14	2.71	3.21	3.00	3.18
Rank (1 = highest preference)	**3**	**1**	**5**	**2**	**4**

7 Conclusions and recommendations

7.1 The need for conservation action for African-Eurasian migratory raptors

Despite some data limitations, it is clear that at least 39 (51%) of African-Eurasian migratory raptor species have an unfavourable conservation status at a global or regional level (Table 6). Indeed twelve of these are Globally Threatened or Near Threatened (see Table 2). Furthermore, a high proportion of these species are in continued long-term or rapid population declines.

Analysis of the known threats to raptors in Africa and Eurasia suggests that there are a substantial number and variety of factors causing unfavourable conservation status. However, the principal threats over the next ten years are likely to be habitat loss and degradation (especially as a result of agricultural expansion and intensification, overgrazing of remaining natural grasslands and wetland loss), shooting of migrating raptors (particularly in the Mediterranean region and Middle-East), accidental poisoning, electrocution on power lines, deliberate persecution and disturbance of breeding birds.

In the longer term, climate change is expected to exacerbate these habitat-related problems profoundly across the entire African-Eurasian region.

Analysis of existing MEAs reveals that a wide range of interlocking (if not partially overlapping) legislation already exists that, in principle, covers all the threats faced by migratory raptors in Africa and Eurasia. However, it is also apparent that these are currently not sufficient to prevent declines in migratory raptor populations mainly because there is a lack of a unifying international plan of action that leads to concerted efforts for conserving migratory raptors in Africa and Eurasia. Only the CMS provides a mechanism that can formulate and implement such an international plan of action that can coordinate and integrate the application of existing MEAs and address and remaining gaps.

Given the continued rapid declines in several species we conclude that there is clear and urgent need for further internationally coordinated action for migratory raptors in Africa and Eurasia.

7.2 Support for a new CMS instrument for migratory raptors in Africa and Eurasia

The responses from the consultation exercise, while neither comprehensive nor official (and not covering South and East Asia), did strongly support the findings of the Raptor Status Report (Tucker & Goriup 2005), namely (i) that few migratory owls have an unfavourable conservation status at present; (ii) that a high proportion of migratory African-Eurasian raptors have an unsatisfactory conservation status; and (iii) they would benefit from a new CMS instrument to improve their conservation status.

However, some strong reservations were expressed about the exclusion of owls from any CMS instrument, and also that the list of raptors identified as most threatened would probably increase if better data on intra-African migrants were available.

The general preference among respondents on the form of CMS instrument was for a new MoU (accompanied by an Action Plan). The second preferences differed among organisation types: governmental bodies tended toward an expansion of AEWA while the research and non-governmental bodies favoured an Article 4(3) Agreement. This suggested that there would

be some support for moving from an MoU to a stronger stand alone instrument having its own administrative structures (either through AEWA or a new Agreement) if it is found to be necessary in the future.

As a result of these findings, we recommend that a draft MoU with Action Plan should be prepared for further consideration by the CMS Conference of Parties.

The consultation also indicated that the Action Plan should focus on urgent conservation measures for the migratory raptor species identified in the Raptor Status Report as having an unfavourable status. But it should also include actions to maintain and monitor the status of other migratory raptors, and to clarify the migratory status of African raptors.

7.3 Interactions between existing MEAs and a new instrument for migratory raptors in Africa and Eurasia

As discussed in Chapter 5 (and above) a range of instruments already exist that should in principle address most of the key actions required for migratory raptors. Some consultees also raised concerns that their capacity for implementing existing instruments (such as AEWA) was already limited, and therefore any new instrument would add little benefit, and might even interfere with existing actions. We therefore recommend that the MoU should reiterate and strengthen calls for actions under existing MEAs where appropriate, whilst the Action Plan should focus on identifying new priority actions that are not currently included within existing initiatives as well provide a unifying approach for concerted actions.

7.4 Scope of a new instrument for migratory raptors in Africa and Eurasia

On the basis of the above considerations and the results of the Raptor Status Report and consultation, we recommend that the MoU and Action Plan should:

- Focus on diurnal migratory birds of prey of the Africa and Eurasia. This is because most owls currently appear to have a favourable conservation status (only one owl appears to require international actions) and there is relatively little overlap between the threats to owls and raptors. However, we conclude that the disadvantages of excluding owls from a CMS instrument is outweighed by the practical benefits of engaging a wider range of interests, and the additional actions are not onerous.
- Only cover true migratory raptor species that regularly occur within Africa and Eurasia as listed in Annex 3 (which includes partial migrants). For practical reasons the instrument should exclude nomadic species and species that technically meet the CMS migratory species definition because they regularly cross one or more national boundaries, but are short-distance migrants, which travel less 100 km. The species include a sufficient number and diversity of raptors and range of coverage that the additional listing of short-distance ('technical') migrants would be of little additional benefit, because many short-distance migrants would benefit from actions proposed for other migratory raptors.
- The African-Eurasia region covered by the proposed MoU should include the Afrotropical, Indo-Malayan and Palearctic realms but for the immediate future exclude countries that fall primarily within the eastern Asian flyway (see Section 3.4). The MoU region should therefore comprise all countries within Africa (including Madagascar but excluding the archipelagos of Cape Verde, Comores and Seychelles and other islands), Europe and Asia (including Sri

Lanka, but excluding other offshore island territories). With respect to the eastern Asian flyway (covering Brunei, Cambodia, Indonesia, Japan, Laos, Malaysia, Myanmar, North Korea, Philippines, Singapore, South Korea, Thailand, Timor-Leste (East Timor) and Vietnam), there is at present insufficient evidence that including the region in a new instrument at this stage would bring additional global benefits for migratory raptors.

- Cover all migratory raptors that regularly occur within the region covered by the MoU, as described above, prioritised according to their conservation status. The MoU therefore covers all species listed in Annex 3, other than spotted harrier (Circus assimilis) which is only found in south-east Asia and Australasia. However, highest priority should be given to actions for globally threatened species first and foremost, followed by actions for other species with an unfavourable conservation status at a regional level. Finally, actions should also be taken as necessary for other migratory species to maintain their favourable status.
- Focus on key transboundary actions that will address the key threats to migratory raptors (as listed above), including:
  - reviewing and where necessary strengthening the legal protection afforded to raptors;
  - alleviating threats related to habitat degradation and loss;
  - protecting and managing important sites for migratory raptors, especially bottleneck sites, because threats can have a disproportionate impact on populations at such sites.

And to support these objectives the Action Plan should:

- Promote activities that raise awareness of migratory raptors, their current plight and the threats that they face, and the measures that need to be taken to conserve them.
- Monitor raptor populations throughout the region to establish reliable population trends, and carry out research to establish the impacts of threats on them and the measures that are needed to alleviate them.
- Identify regions where actions should be taken, and priorities and responsibilities for their implementation. It is not proposed to specify directly which individual countries should be expected to take actions at this stage, because there is insufficient information to consistently and reliably identify where actions must be taken. Further consultation with CMS Focal Points and other stakeholders within the countries covered by the Action Plan would be required to achieve this.

7.5 Potential problems with establishing a new instrument for migratory raptors in Africa and Eurasia

The main problems that a new MoU will face in delivering conservation benefits for raptors are considered to be as follows:

- obtaining the necessary number and type of signatory range states to make it operational, bearing in mind some have reservations over their existing burdens;
- implementing the MoU given that it has no formal legal standing or budget and therefore depends for effectiveness entirely on the goodwill of the participating states;

- maintaining a high level of coordination and support given the number of species and wide geographic range since the Secretariat is provided by the Convention Secretariat and the level of input will depend on the resources available to them and other programme priorities;
- possible confusion with the existing AEWA.

It is therefore recommended that, if the Conference of Parties supports the establishment of a new MoU and Action Plan for African-Eurasian Migratory Raptors, then an *ad hoc* consortium of range states representative of the area of coverage should be formed to parent the MoU in consultation with the Convention Secretariat.

The consortium would undertake the following tasks pending the entry in to force of the MoU itself:

- appoint an interim coordinator, under the auspices of the Convention Secretariat (but not necessarily co-located with it) to liaise with range states and encourage them to sign the MoU;
- ensure close coordination with the Secretariat of AEWA and other MEA agencies;
- provide funding for the administrative costs of the coordinator;
- arrange and fund the first Meeting of Signatories in cooperation with the Convention Secretariat.

7.6 Financing required for a new instrument for migratory raptors in Africa and Eurasia to deliver additional conservation benefits

On the assumption that the draft Memorandum of Understanding and Action Plan given in the Attachment are adopted more or less as set out, a cost estimation was made for implementing the Action Plan over a 5 year period (Table 15).

The estimate allows only for the expected incremental cost on top of domestic expenditure that signatories would be expected to disburse in the normal course of their nature conservation activities or from additional national commitments undertaken by signing the MoU. However, some provision has been made, in accordance with paragraph 17 of the MoU on mutual financial assistance, for funding priority actions for surveys, management planning and awareness raising through establishing special grant programmes to be administered by the MoU Secretariat. Provision is also made for operational costs and supporting attendance at Meetings of Signatories.

The cost estimate totals US$2,235,000 over five years. While this sum is rather higher than for other existing CMS MoUs, it should be borne in mind that this MoU covers by far the greatest number of range states and migratory species. In this regard, its scope more resembles that of AEWA which has a triennial budget exceeding US$10m.

Moreover, in global conservation terms, the amount is quite modest and could be raised through fostering private/public partnerships and by in-kind or offset contributions. Ultimately, however, it will of course be up to the signatories to the agreement to approve the action plan and determine an appropriate level of funding.

Table 15: Cost estimate for implementing an International Action Plan for African-Eurasian Migratory Raptors over five years (starting with 1st meeting of Range States)

Activities	Priority Level	Time-scale	Item	Year 1 US$	Year 2 US$	Year 3 US$	Year 4 US$	Year 5 US$	Total US$
0: MoU Management									
First meeting of signatories: 20 countries; 1 rep each funded				45,000					45,000
Second meeting of signatories: 40 countries, 1 rep each funded							100,000		100,000
Coordination (staff, office, travel, incidentals)				60,000	60,000	65,000	70,000	75,000	330,000
Sub-total				105,000	60,000	65,000	170,000	75,000	475,000
1: Improvement of legal protection									
1.1 Update CMS appendices to include all Category 1 species on Annex 1	Second	Short							0
1.2 Ensure national legislation protects all raptors from all forms of killing, disturbance at nest sites, egg-collection and taking from the wild unless this can be shown to be sustainable and forms part of an international Management Plan agreed by parties to this MoU	First	Immediate							0
1.3 Ensure that national legislation bans the use of exposed poison baits for predator control	First	Immediate							0
1.4 Ensure that national legislation requires all new power lines to be designed to avoid bird prey electrocution	Second	Short							0
1.5 Strengthen the application of legal protection for raptors by training law enforcement authorities, and raising public awareness to boost surveillance and reporting of illegal activities, particularly at bottleneck sites.	Second	Ongoing							0
1.6 Identify gaps in existing MEAs where raptor protection and conservation can be improved and draw these to the attention of the relevant secretariat and other parties	Third	Intermediate	Consultancy		35,000				35,000
Sub-total				0	35,000	0	0	0	35,000

Activities	Priority Level	Time-scale	Item	Year 1 US$	Year 2 US$	Year 3 US$	Year 4 US$	Year 5 US$	Total US$
2: Protect and manage important sites and flyways									
2.1 Designate important sites (listed in Table 3) as protected areas with management plans that are agreed with key stakeholders and take bird of pray conservation requirements into account	Second	Medium	Consultancies for ca.30 sites		120,000	120,000	120,000		360,000
2.2 Include important sites (listed in Table 3) in the EU within the Natura 2000 network	Second	Short							0
2.3 Require EIAs in accordance with the CBD guidelines (CBD Decision VI/7A and any subsequent amendments) for any projects impacting sites listed in Table 3	Third	Medium							0
2.4 Conduct risk assessments at important sites (listed in Table 3) to identify and address actual or potential causes of incidental mortality from human causes (including fire, laying poisons, pest spraying, power lines, wind turbines)	Third	Ongoing							0
2.5 Conduct strategic environmental assessments of planned infrastructure developments within major flyways to identify key risk areas	Third	Medium							0
Sub-total				0	120,000	120,000	120,000	0	360,000
3: Habitat conservation and sustainable management									
3.1 Develop schemes under the EU EAFRD/ Rural Development Regulation that are targeted towards maintaining or restoring habitats for raptors	Second	Ongoing							0
3.2 Survey, maintain and restore natural vegetation cover in former habitats (especially grasslands) in the range of globally threatened species	Third	Long	Surveys in Africa and Asia		60,000	70,000	80,000	100,000	310,000
Sub-total				0	60,000	70,000	80,000	100,000	310,000

Activities	Priority Level	Time-scale	Item	Year 1 US$	Year 2 US$	Year 3 US$	Year 4 US$	Year 5 US$	Total US$
4: Raise awareness of problems faced by migratory raptors and measures needed to conserve them			Small Grant Programme for NGOs		50,000	65,000	80,000	100,000	295,000
4.1 Develop a programme of public awareness, using TV, radio, newspapers and the internet to publicise the migrations undertaken by raptors, their current status, the threats to them and actions that can be taken to conserve them	Second	Short							0
4.2 Develop an awareness programme within forestry, agriculture, fisheries, energy, industry and transport etc to inform decision makers of the current status of raptors, the threats to them and the sectoral actions that can be taken to conserve them	Second	Medium							0
4.3 Develop a school educational programme and teaching resources to inform school children of the migrations undertaken by raptors, their current status, the threats to them and actions that can be taken to conserve them	Third	Medium							0
4.4 Establish information notices and provide leaflets at bottleneck sites informing people of their importance for migrating raptors and the measures that they can take to conserve them	Second	Short							0
Sub-total				0	50,000	65,000	80,000	100,000	295,000
5: Monitor bird of prey populations and carry out conservation research			Bird of prey monitoring and research fund		120,000	120,000	130,000	140,000	510,000
5.1 Establish a monitoring network comprising a representative range of sites where systematic and coordinated monitoring of breeding populations and migration numbers (spring and autumn) can be undertaken	Third	Immediate							0
5.2 Design and undertake a coordinated monitoring programme based on the monitoring network established under 5.1	Third	Ongoing							0

Activities	Priority Level	Time-scale	Item	Year 1 US$	Year 2 US$	Year 3 US$	Year 4 US$	Year 5 US$	Total US$
5.3 Assess the impacts of habitat change on breeding, passage and wintering populations of raptors, and identify required measures to maintain Favourable Conservation Status	Second	Medium							0
5.4 Assess the impacts of the use of toxic agrochemicals on breeding, passage and wintering populations of raptors, and identify required measures to maintain Favourable Conservation Status	Second	Medium							0
Sub-total				0	120,000	120,000	130,000	140,000	510,000
6: Supporting measures									
6.1 National Plans of Action for migratory raptors	Second	Immediate	Consultancies	90,000					90,000
6.2 International Plan of Action for migratory raptors	Second	Short	Consultancy	40,000					40,000
6.3 Prepare single species action plans for all globally threatened species, taking account of existing international plans and where necessary extending them to cover the entire African-Eurasian range of each species	First	Medium	Consultancies		60,000	30,000	30,000		120,000
6.4 Update Tables 1 and 3 according to new information emerging from the monitoring programme	Third	Ongoing							0
Sub-total				130,000	60,000	30,000	30,000	0	250,000
TOTAL				**235,000**	**505,000**	**470,000**	**610,000**	**415,000**	**2,235,000**

8 References

Batdelger, D., and E. Potapov. 2002. Mass mortality of birds in Mongolia. Falco. The newsletter of the Middle East Falcon Research Group **20**:4-5.

Bennett, P. M., and I. P. F. Owens. 1997. Variation in extinction risk among birds: chance or evolutionary predisposition? Proceedings of the Royal Society of London B:401-408.

Biber, J.-P. 1996. International action plan for the Lesser Kestrel *Falco naumanni*. Pages 191-203 in B. Heredia, L. Rose, and M. Painter, editors. Globally threatened birds in Europe: action plans. Council of Europe, and BirdLife International, Strasbourg.

BirdLife International 2001. Threatened birds of Asia: the BirdLife International Red Data Book. BirdLife International, Cambridge, UK.

BirdLife International 2004a. Birds in Europe: population estimates, trends and conservation status. BirdLife International, Cambridge.

BirdLife International 2004b. State of the world's birds 2004: indicators for our changing world. BirdLife International, Cambridge.

BirdLife International. 2004c. Threatened birds of the world. CD-ROM. BirdLife International, Cambridge.

Chancellor, R. D., and B.-U. Meyburg, editors. 1998. Raptors at risk: proceedings of the V World Conference on Birds of Prey and Owls. Midrand, Johannesburg, South Africa, 4-11 August 1998. World Working Group on Birds of Prey and Owls, Berlin.

Curtis, O., R. E. Simmons, and A. R. Jenkins. 2004. Black Harrier of the fynbos biome, South Africa: a threatened specialist or an adaptable survivor? Bird Conservation International **14**:233-245.

del Hoyo, J., A. Elliott, and J. Sargatal, editors. 1994. Handbook of the birds of the world. Vol. 2: New World vultures to guineafowl. Lynx Edicions, Barcelona.

Ferguson-Lees, J., and D. A. Christie 2001. Raptors of the world. Christopher Helm, London.

Fox, N. 2004. Editorial. Falco. The newsletter of the Middle East Falcon Research Group **23**:2.

Galushin, V., R. Clarke, and A. Davygora 2003. International Action Plan for the Pallid Harrier (*Circus macrourus*). BirdLife International, Cambridge.

Galushin, V., and V. Moseikin. 2000. The Saker Falcon *Falco cherrug* in European Russia. Pages 275-278 in R. D. Chancellor, and B.-U. Meyburg, editors. Raptors at risk: proceedings of the V world conference on birds of prey and owls. Johannesburg, South Africa 4-11 August 1998. World Working Group on Birds of Prey and Owls, Berlin.

Galushin, V. M. 2004. Status of Saker in Russia and Eastern Europe. Falco. The newsletter of the Middle East Falcon Research Group **24**:3-8.

Gombobaatar, S., D. Sumiya, O. Shagdarsuren, E. Potapov, and N. Fox. 2004. Saker Falcon (*Falco cherrug milvipes* Jerdon) mortality in Central Mongolia and population threats. Mongolian Journal of Biological Sciences **2**:13-21.

Goriup, P., and G. M. Tucker. 2005. Assessment of the merits of an instrument under the Convention on Migratory Species (CMS) covering migratory raptors in the African-Eurasian region. Final report with draft MoU and Action Plan. NatureBureau Report to DEFRA UK, Bristol.

Gott, E. J., H. MacDonald, and N. C. Fox. 2000. The Saker Falcon *Falco cherrug* in the Kyrgz Republic. Pages 269-273 in R. D. Chancellor, and B.-U. Meyburg, editors. Raptors at risk: proceedings of the V world conference on birds of prey and owls. Johannesburg, South Africa 4-11 August 1998. World Working Group on Birds of Prey and Owls, Berlin.

Grimmett, R. F. A., and T. A. Jones 1989. Important Bird Areas in Europe. International Council for Bird Preservation, Cambridge.

Groombridge, B., and M. D. Jenkins 2002. World atlas of biodiversity. UNEP-WCMC/University of California Press, Berkeley, USA.

Gustin, M., G. Palumbo, and A. Corso 1990. International Action Plan for the Lanner Falcon *Falco biarmicus*. BirdLife International, Cambridge.

Harrison, J. A., D. G. Allan, L. G. Underhill, M. Herremans, A. J. Tree, V. Parker, and C. J. Brown, editors. 1997. The atlas of southern African birds, 1: Non-passerines. BirdLife South Africa, Johannesburg, South Africa.

Hartley, R. R. 1998. Raptor migration and conservation in Zimbabwe. Pages 135-150 in Y. Leshem, E. Lachman, and P. Berthold, editors. Migrating birds know no boundaries. Scientific and educational aspects of migrating bird conservation. International Center for the Study of Bird Migration, Latrun.

Hartley, R. R., K. Hustler, and P. J. Mundy. 1996. The impact of man on raptors in Zimbabwe in D. M. Bird, D. E. Varland, and J. J. Negro, editors. Raptors in human landscapes`. Academic Press, London.

Heath, M. F., and M. I. Evans 2000. Important Bird Areas in Europe: priority sites for conservation. BirdLife International, Cambridge.

Heredia, B. 1996a. Action plan for the Cinereous Vulture (*Aegypius monachus*) in Europe. Pages 147-158 in B. Heredia, L. Rose, and M. Painter, editors. Globally threatened birds in Europe: action plans. Council of Europe, and BirdLife International, Strasbourg.

Heredia, B. 1996b. Action plan for the Imperial Eagle (*Aquila heliaca*) in Europe. Pages 159-174 in B. Heredia, L. Rose, and M. Painter, editors. Globally threatened birds in Europe: action plans. Council of Europe, and BirdLife International, Strasbourg.

Herremans, M., and D. Herremans-Tonnoeyr. 2001. Roadside comparison of raptors in the WC Province, South Africa, a 3-decade comparison. Ostrich **72**:96-100.

IPCC. 2007. Climate Change 2007: The physical science basis. Summary for policymakers. Intergovermental Panel on Climate Change, Geneva.

IUCN 2001. IUCN Red List categories and criteria: Version 3.1. IUCN Species Survival Commission, Gland, Switzerland and Cambridge, UK.

Karyakin, I., L. Konovalov, A. Moshkin, A. Pazhenkov, I. Smelyanskiy, and A. Rybenko. 2004. Saker Falcon (*Falco cherrug*) in Russia. Falco. The newsletter of the Middle East Falcon Research Group **23**:4-9.

Levin, A., M. Watson, H. MacDonald, and N. C. Fox. 2000. The Saker Falcon *Falco cherrug* in Kazakstan. Pages 259-262 in R. D. Chancellor, and B.-U. Meyburg, editors. Raptors at risk: proceedings of the V world conference on birds of prey and owls. Johannesburg, South Africa 4-11 August 1998. World Working Group on Birds of Prey and Owls, Berlin.

McClure, H. E. 1998. Migration and survival of the birds of Asia. White Lotus Press, Bangkok, Thailand.

Meyburg, B.-U., and R. D. Chancellor, editors. 1989. Raptors in the modern World: proceedings of the III World conference on birds of prey and owls. Eilat, Israel 22-27 March 1987. World Working Group on Birds of Prey and Owls, Berlin and London.

Meyburg, B.-U., and R. D. Chancellor 1994. Raptor conservation today. World Working Group on Birds of Prey and Owls and Pica Press, Berlin and Mountfield, U.K.

Meyburg, B.-U., L. Haraszthy, M. Strazds, and N. Schäffer 1999a. European species action plan for Greater Spotted Eagle (*Aquila clanga*). BirdLife International, Cambridge.

Meyburg, B.-U., L. Haraszthy, M. Strazds, and N. Schäffer 1999b. European species action plan for Lesser Spotted Eagle (*Aquila pomarina*). BirdLife International, Cambridge.

Meyburg, B.-U., W. Scheller, and C. Meyburg. 1995. Zug und Überwinterung des Schreiadlers *Aquila pomarina*: satellitentelemetrische untersuchungen. Journal fur Ornithology **136**:401-422.

Ming, M. 1999. Saker smugglers target western China. Oriental Bird Club Bulletin **29**:17.

Ming, M. 2000. Important Bird Areas (IBAs) with globally threatened birds of Xinjiang, China. Chinese Journal of Arid Land Research **10**:281-284.

Ming, M. 2001a. A checklist of the birds in Xinjiang, China. Arid Zone Research **18 (Supplement)**.

Ming, M. 2001b. The problems about conservation of wildlife animals in Xinjiang. Arid Land Geography **24**:47-51.

Ming, M. 2004. Recent data on Saker smuggling in China. Falco. The newsletter of the Middle East Falcon Research Group **23**.

Ming, M., M. Yu, T. Leilei, W. Yi-Qun, C. Ying, X. Feng, A. Dixon, E. Potapov, I. Angelov, D. Ragyov, and I. Balazs. 2006. Saker Falcon in the desert of north Xinjiang, China. Raptor Conservation **6**:58-64.

Newton, I. 1979. Population ecology of raptors. T & A D Poyser Ltd, Hertfordshire, England.

Newton, I. 2003. The speciation and biogeography of birds. Academic Press, Amsterdam.

Newton, I., and R. D. Chancellor, editors. 1985. Conservation studies on raptors. (Technical Publication No. 5). International Council for Bird Preservation, Cambridge.

Ntampakis, D., and I. Carter. 2005. Red Kites and rodenticides – a feeding experiment. British Birds **98**:411-416.

Owen, M., and J. M. Black. 1991. The importance of migration mortality in non-passerine birds in C. M. Perrins, J.-D. Lebreton, and G. J. M. Hirons, editors. Bird population studies. Oxford University Press, Oxford.

Pepler, D. 1996. Management of Lesser Kestrels *Falco naumanni* overwintering in Africa. University of Cambridge, Cambridge.

Ristow, D. 1999. International Species Action Plan for Eleonora's falcon *Falco eleonorae*. BirdLife International, Cambridge.

Salathe, T., editor. 1991. Conserving migratory birds. International Council for Bird Preservation, Cambridge, UK.

Saurola, P. L. 1997. The osprey (*Pandion haliaetus*) and modern forestry: A review of population trends and their causes in Europe. Journal of Raptor Research **31**:129-137.

Shijirmaa, D., E. Potapov, and S. Banzragch. 2000. The Saker Falcon *Falco cherrug* in Mongolia. Pages 263-268 in R. D. Chancellor, and B.-U. Meyburg, editors. Raptors at risk: proceedings of the V world conference on birds of prey and owls. Johannesburg, South Africa 4-11 August 1998. World Working Group on Birds of Prey and Owls, Berlin.

Shirihai, H., R. Yosef, D. Alon, G. M. Kirwan, and R. Spaar 2000. Raptor migration in Israel and the Middle East. A summary of 30 years of field research. International Birding and Research Centre, Eilat, Israel.

Simmons, R. E., and C. J. Brown 2005. Birds to Watch in Namibia: red, rare and endemic species. National Biodiversity Programme, Windhoek, Namibia.

Snow, D. W., and C. M. Perrins 1998. The Birds of the Western Palearctic. Concise edition. Oxford University Press, Oxford.

Stroud, D. A. 2003. The status and legislative protection of birds of prey and their habitats in Europe. Pages 51-84 in D. B. A. Thompson, S. M. Redpath, A. H. Fielding, M. Marquiss, and C. A. Galbraith, editors. Birds of prey in a changing environment. The Stationary Office, Edinburgh.

Tarboton, W. R., and D. G. Allan 1984. Status and conservation of birds of prey of the Transvaal. Transvaal Museum, Pretoria.

Thiollay, J.-M. 1989. Distribution and ecology of Palearctic birds of prey wintering in west and central Africa. Pages 95-122 in B.-U. Meyburg, and R. D. Chancellor, editors. Raptors in the modern World: proceedings of the III World conference on birds of prey and owls. Eilat, Israel 22-27 March 1987. World Working Group on Birds of Prey and Owls, Berlin and London.

Thiollay, J.-M. 1994. Accipitridae (Hawks and Eagles). Pages 52-105 in J. del Hoyo, A. Elliott, and J. Sargatal, editors. Handbook of the birds of the world. Vol. 2: New World vultures to guineafowl. Lynx Edicions, Barcelona.

Thiollay, J.-M. 2006a. The decline of raptors in West Africa: long-term assessment, human pressure and role of protected areas. Ibis **148**:240–254.

Thiollay, J.-M. 2006b. Large bird declines with increasing human pressure in savanna woodlands (Burkina Faso). Biodiversity and Conservation **15**:2085-2108.

Thiollay, J.-M. in press. Raptor population decline in West Africa. Proceedings of the PanAfrican Ornithological Congress. Ostrich.

Tucker, G. M., and M. Evans 1997. Habitats for birds in Europe: a conservation strategy for the wider environment. BirdLife International, Cambridge.

Tucker, G. M., and P. Goriup. 2005. The status of raptors and owls in the African-Eurasian region. NatureBureau Report to DEFRA UK, Bristol.

Tucker, G. M., and M. F. Heath 1994. Birds in Europe: their conservation status. BirdLife International, Cambridge.

Ueta, M., R. Kurosawa, and H. Matsuno. 2006. Habitat loss and the decline of grey-faced buzzards (*Butastur indicus*) in Tokyo, Japan. Journal of Raptor Research **40**:52-56.

van Balen, S. 1998. Tropical forest raptors in Indonesia: recent information on distribution, status, and conservation. Journal of Raptor Research **32**:56-63.

White, C. M., P. D. Olsen, and L. F. Kiff. 1994. Falconidae (Falcons and Caracaras). Pages 216-247 in J. del Hoyo, A. Elliott, and J. Sargatal, editors. Handbook of the birds of the world. Vol. 2: New World vultures to guineafowl. Lynx Edicions, Barcelona.

Zalles, J. A., and K. L. Bildstein, editors. 2000. Raptor watch: a global directory of raptor migration sites. Hawk Mountain Sanctuary and BirdLife International, Kempton, Pennsylvania and Cambridge, UK.

Annex 1

International Resolutions on Migratory Raptors

VI World Conference on Birds of Prey and Owls
Budapest, Hungary, 18-23 May 2003

Resolution 3

RECALLING that the Convention on the Conservation of Migratory Species of Wild Animals 1979 (CMS) encourages international cooperative action to conserve migratory species;

CONSIDERING that migratory raptors constitute an important part of the global biological diversity which, in keeping with the spirit of the Convention on Biological Diversity 1992 and Agenda 21, should be conserved for the benefit of present and future generations;

AWARE of the environmental, ecological, genetic, scientific, aesthetic, recreational, cultural, educational, social and economic values of raptors in general;

CONSCIOUS that migratory raptors are particularly vulnerable because they migrate over long distances, with many species being reliant upon land-bridges and/or networks of fragile habitats that are declining in extent and becoming degraded through unsustainable human activities;

RECOGNISING the need to take immediate action to halt the decline of migratory raptor populations and their habitats in the geographic area of the African-Eurasian raptor migration systems;

CONVINCED that a multilateral agreement and its implementation through coordinated and concerted action would contribute significantly to the conservation of migratory raptors and their habitats in the most effective manner, and would deliver ancillary benefits for many other species of animal and plant;

URGES the CMS Secretariat and other bodies of CMS, notably the Scientific Council, urgently to consider establishing a multilateral agreement on the conservation of African-Eurasian migratory raptors;

ACKNOWLEDGES that effective implementation of such an agreement would require assistance to be provided to some range states for research, training and monitoring of migratory raptor species and their habitats, for the management of those habitats as well as for the establishment or improvement of scientific and administrative institutions for the implementation of such an agreement; and

FURTHER URGES all range states within the African-Eurasian geographic area actively to embrace this proposal and to work together to establish, ratify and implement such an agreement as a matter of urgency.

UNEP

on the move to 2010

CONVENTION ON MIGRATORY SPECIES

Distr: GENERAL

UNEP/CMS/Recommendation 8.12

ORIGINAL: ENGLISH

Improving the Conservation Status of Raptors and Owls in Africa and Eurasia

Adopted by the Conference of the Parties at its Eighth Meeting

(Nairobi, 20-25 November 2005)

Recognising that Article II of the Convention requires all Parties to endeavour to conclude Agreements covering the conservation and management of migratory species listed in Appendix II of the Convention;

Noting that the Sixth Conference of the World Working Group on Birds of Prey and Owls in Budapest, Hungary (18-23 May 2003) called on CMS in its third resolution to consider establishing a multilateral agreement on the conservation of African-Eurasian migratory raptors;

Recognising that raptors are listed in both Appendix I and Appendix II of the Convention, but that a significant majority are in Appendix II;

Further recognising that nine species are categorised as Endangered, Vulnerable and Near Threatened in the IUCN Red List 2004 and that of these, the White-tailed Eagle (*Haliaeetus albicilla*), the Greater Spotted Eagle (*Aquila clanga*), the Imperial Eagle (*Aguila heliaca*) and Lesser Kestrel (*Falco naumanni*), are on CMS Appendix I, and that the Lesser Kestrel was identified for "Concerted Action" at the fifth Conference of the Parties in 1997;

Noting that the study on African-Eurasian migratory raptors and owls commissioned by the United Kingdom earlier this year, and made available to the Eighth Meeting of the Conference of the Parties as document UNEP/CMS/Inf.8.18, found that:

1. More than half the species have an unfavourable conservation status in some part of their African-Eurasian range;

2. There were insufficient data upon which to make meaningful assessments for many species, but where sufficient data were available many species were in continued long-term or often rapid population declines; and

3. The principal threats to raptors and owls over the next 10 years were likely to be habitat loss and degradation, shooting, accidental poisoning, electrocution and power lines, deliberate persecutions and disturbance of breeding grounds, with climate change an additional major threat in the longer term;

Recognising the need for shared responsibility for the conservation and sustainable management of migratory raptors and owls in the regions;

Further recognising that raptors and owls are high-profile species at the top of their food chain and that measures to help conserve them will, in turn, help conserve many other species;

Noting that initial soundings of stakeholders, undertaken as part of the United Kingdom study, revealed that a CMS instrument would improve the conservation status of migratory raptors and owls, and that a Memorandum of Understanding was the preferred instrument;

Aware that a number of multilateral environmental agreements seek to address some of the threats faced by migratory raptors and owls in Africa and Eurasia; and

Further aware that non-governmental organisations, inter-governmental organisations, and the private sector can all play important roles in the co-operative conservation of migratory raptors and owls in the region;

The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

1. *Calls* upon Parties to the Convention, non-party Range States and other stakeholders to engage in co-operative activities to promote the sustainable management of migratory raptors and owls by, in particular:

(a) protecting and managing important breeding sites and migration bottlenecks;

(b) alleviating habitat degradation through the development and promotion of sustainable land management policies and practices;

(c) controlling the shooting, poisoning, and taking of these birds and their eggs;

(d) raising awareness of the plight of these birds, the threats they face, and the measures needed to conserve them;

(e) monitoring populations throughout the region to establish population trends and carry out appropriate research; and

(f) exchanging information in order to develop and implement best-practice approaches to the conservation and sustainable management of these species;

2. *Further calls* upon Parties to the Convention and non-party Range States to consider whether a CMS instrument would better help deliver these objectives and, if so, to participate actively in its development and conclusion with the assistance of the Scientific Council and the Secretariat;

3. *Encourages* existing multilateral environmental agreements that can help eliminate or reduce the threats faced by migratory raptors and owls in the region to improve liaison and find initiatives upon which they can work co-operatively; and

4. *Urges* international organisations and non-governmental organisations, including regional economic organisations, having biodiversity conservation as part of their mandate, to provide appropriate assistance, including technical and financial support, for the conservation and sustainable management of migratory raptors and owls in the region.

Annex 2

The Definition of "Favourable Conservation Status" According to the Convention on the Conservation of Migratory Species of Wild Animals

According to Article 1(c) "conservation status" will be taken as "favourable" when:

(1) population dynamics data indicate that the migratory species is maintaining itself on a long-term basis as a viable component of its ecosystems;

(2) the range of the migratory species is neither currently being reduced, nor is likely to be reduced, on a long-term basis;

(3) there is, and will be in the foreseeable future, sufficient habitat to maintain the population of the migratory species on a long-term basis; and

(4) the distribution and abundance of the migratory species approach historic coverage and levels to the extent that potentially suitable ecosystems exist and to the extent that is consistent with wise wildlife management.

Conversely, Article 1(d) states:

"Conservation status" will be taken as "unfavourable" if any of the conditions set out in sub-paragraph (c) … is not met.

Raptors that Regularly Occur in African and Eurasia (i.e. the Afrotropical, Indomalayan and Palearctic Realms), their Migratory Behaviour and Global Conservation Status

Key/source: Mig = Migratory behaviour: source GROMS (www.groms.de) unless followed with "(BL)", which indicates that BirdLife's migrant listing is followed (see below for reasons). GTS = Global Threat Status according to BirdLife International's WBDB, www.birdlife.org (accessed 12 February 2007): CR = Critical, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern. Occurrence in realms primarily based on WBDB: "✓" indicates regular occurrence within the realm.

Migratory species that are primarily Australasian species with a small proportion of their migratory populations occurring within the African-Eurasian study region are shaded in grey and have been eliminated from further study.

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Polihierax semitorquatus	Pygmy Falcon	NM	LC	✓		
Polihierax insignis	White-rumped Falcon	NM	NT		✓	
Microhierax caerulescens	Collared Falconet	NM	LC		✓	✓
Microhierax fringillarius	Black-thighed Falconet	NM	LC		✓	
Microhierax latifrons	White-fronted Falconet	NM	NT		✓	
Microhierax erythrogenys	Philippine Falconet	NM	LC		✓	
Microhierax melanoleucos	Pied Falconet	NM	LC		✓	✓
Falco berigora	Brown Falcon	NM	LC		✓	
Falco naumanni	Lesser Kestrel	M	VU	✓	✓	✓
Falco tinnunculus	Common Kestrel	M	LC	✓	✓	✓
Falco newtoni	Madagascar Kestrel	NM	LC	✓		
Falco punctatus	Mauritius Kestrel	NM	VU	✓		
Falco araea	Seychelles Kestrel	NM	VU	✓		
Falco moluccensis	Spotted Kestrel	NM	LC		✓	
Falco cenchroides	Nankeen Kestrel	M	LC		✓	
Falco rupicoloides	Greater Kestrel	NM	LC	✓		
Falco alopex	Fox Kestrel	M	LC	✓		
Falco ardosiaceus	Grey Kestrel	NM	LC	✓		
Falco dickinsoni	Dickinson's Kestrel	NM	LC	✓		
Falco zoniventris	Banded Kestrel	NM	LC	✓		
Falco chicquera	Red-necked Falcon	NM	LC	✓	✓	
Falco vespertinus	Red-footed Falcon	M	NT	✓		✓
Falco amurensis	Amur Falcon	M	LC	✓	✓	✓
Falco eleonorae	Eleonora's Falcon	M	LC	✓		✓

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Falco concolor	Sooty Falcon	M	LC	✓	✓	✓
Falco columbarius	Merlin	M	LC		✓	✓
Falco subbuteo	Eurasian Hobby	M	LC	✓	✓	✓
Falco cuvierii	African Hobby	NM	LC	✓		
Falco severus	Oriental Hobby	M	LC		✓	✓
Falco longipennis	Australian Hobby	M	LC		✓	
Falco biarmicus	Lanner Falcon	M	LC	✓		✓
Falco jugger	Laggar Falcon	NM	NT		✓	✓
Falco cherrug	Saker Falcon	M	EN	✓	✓	✓
Falco rusticolus	Gyr Falcon	M	LC			✓
Falco peregrinus	Peregrine Falcon	M	LC	✓	✓	✓
Falco pelegrinoides	Barbary Falcon	M (BL)	LC	✓	✓	✓
Falco fasciinucha	Taita Falcon	NM	NT	✓		
Sagittarius serpentarius	Secretarybird	NM	LC	✓		
Pandion haliaetus	Osprey	M	LC	✓	✓	✓
Aviceda cuculoides	African Baza	M	LC	✓		
Aviceda madagascariensis	Madagascar Baza	NM	LC	✓		
Aviceda jerdoni	Jerdon's Baza	M	LC		✓	✓
Aviceda subcristata	Pacific Baza	NM	LC		✓	
Aviceda leuphotes	Black Baza	M	LC		✓	✓
Henicopernis longicauda	Long-tailed Honey-buzzard	NM	LC		✓	
Pernis apivorus	European Honey-buzzard	M	LC	✓		✓
Pernis ptilorhyncus	Oriental Honey-buzzard	M	LC		✓	✓
Pernis celebensis	Barred Honey-buzzard	NM	LC		✓	
Macheiramphus alcinus	Bat Hawk	NM	LC	✓	✓	
Macheiramphus alcinus	Bat Hawk	NM	LC	✓		
Elanus caeruleus	Black-winged Kite	NM	LC	✓	✓	✓
Chelictinia riocourii	African Swallow-tailed Kite	M	LC	✓		
Milvus milvus	Red Kite	M	NT	✓		✓
Milvus migrans	Black Kite	M	LC	✓	✓	✓
Milvus lineatus	Black-eared Kite	M (BL)	LC		✓	✓
Haliastur sphenurus	Whistling Kite	NM	LC		✓	
Haliastur indus	Brahminy Kite	NM	LC		✓	✓
Haliaeetus leucogaster	White-bellied Sea-eagle	NM	LC		✓	✓
Haliaeetus vocifer	African Fish-eagle	NM	LC	✓		

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Haliaeetus vociferoides	Madagascar Fish-eagle	NM	CR	✓		
Haliaeetus leucoryphus	Pallas's Fish-eagle	M	VU		✓	✓
Haliaeetus albicilla	White-tailed Eagle	M	LC		✓	✓
Haliaeetus pelagicus	Steller's Sea-eagle	M	VU			✓
Ichthyophaga humilis	Lesser Fish-eagle	NM	NT		✓	✓
Ichthyophaga ichthyaetus	Grey-headed Fish-eagle	NM	NT		✓	
Gypohierax angolensis	Palm-nut Vulture	NM	LC	✓		
Gypaetus barbatus	Lammergeier	NM	LC	✓	✓	✓
Neophron percnopterus	Egyptian Vulture	M	LC	✓	✓	✓
Necrosyrtes monachus	Hooded Vulture	NM	LC	✓		
Gyps africanus	White-backed Vulture	NM	LC	✓		
Gyps bengalensis	White-rumped Vulture	NM	CR		✓	✓
Gyps indicus	Indian Vulture	NM	CR		✓	
Gyps tenuirostris	Slender-billed Vulture	NM	CR		✓	
Gyps rueppellii	Rueppell's Griffon	NM	LC	✓		
Gyps himalayensis	Himalayan Vulture	NM	LC		✓	✓
Gyps fulvus	Griffon Vulture	M	LC	✓	✓	✓
Gyps coprotheres	Cape Griffon	NM	VU	✓		
Sarcogyps calvus	Red-headed Vulture	NM	NT		✓	✓
Trigonoceps occipitalis	White-headed Vulture	NM	LC	✓		
Aegypius monachus	Cinereous Vulture	M	NT	✓	✓	✓
Torgos tracheliotos	Lappet-faced Vulture	NM	VU	✓		✓
Circaetus gallicus	Short-toed Snake-eagle	M	LC	✓	✓	✓
Circaetus pectoralis	Black-chested Snake-eagle	NM	LC	✓		
Circaetus beaudouini	Beaudouin's Snake-eagle	NM	VU	✓		
Circaetus cinereus	Brown Snake-eagle	NM	LC	✓		
Circaetus fasciolatus	Southern Banded Snake-eagle	NM	NT	✓		
Circaetus cinerascens	Banded Snake-eagle	NM	LC	✓		
Terathopius ecaudatus	Bateleur	NM	LC	✓		
Spilornis cheela	Crested Serpent-eagle	NM	LC		✓	✓
Spilornis klossi	South Nicobar Serpent-eagle	NM	NT		✓	
Spilornis kinabaluensis	Mountain Serpent-eagle	NM	VU		✓	
Spilornis rufipectus	Sulawesi Serpent-eagle	NM	LC		✓	
Spilornis holospilus	Philippine Serpent-eagle	NM	LC		✓	
Spilornis elgini	Andaman Serpent-eagle	NM	NT		✓	

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Dryotriorchis spectabilis	Congo Serpent-eagle	NM	LC	✓		
Circus aeruginosus	Western Marsh-harrier	M	LC	✓	✓	✓
Circus ranivorus	African Marsh Harrier	NM	LC	✓		
Circus spilonotus	Eastern Marsh-harrier	M	LC		✓	✓
Circus approximans	Swamp Harrier	M	LC		✓	
Circus macrosceles	Madagascar Harrier	NM	VU	✓		
Circus maillardi	Réunion Harrier	NM	EN	✓		
Circus assimilis	Spotted Harrier	M	LC		✓	
Circus maurus	Black Harrier	M	VU	✓		
Circus cyaneus	Northern Harrier	M	LC		✓	✓
Circus macrourus	Pallid Harrier	M	NT	✓	✓	✓
Circus melanoleucos	Pied Harrier	M	LC		✓	✓
Circus pygargus	Montagu's Harrier	M	LC	✓	✓	✓
Polyboroides typus	African Harrier-hawk	NM	LC	✓		
Polyboroides radiatus	Madagascar Harrier-hawk	NM	LC	✓		
Melierax poliopterus	Eastern Chanting-goshawk	NM	LC	✓		
Melierax canorus	Pale Chanting-goshawk	NM	LC	✓		
Melierax gabar	Gabar Goshawk	NM	LC	✓		
Accipiter trivirgatus	Crested Goshawk	NM	LC		✓	✓
Accipiter griseiceps	Sulawesi Goshawk	NM	LC		✓	
Accipiter tachiro	African Goshawk	NM	LC	✓		
Accipiter castanilius	Chestnut-flanked Sparrowhawk	NM	LC	✓		
Accipiter badius	Shikra	M	LC	✓	✓	✓
Accipiter butleri	Nicobar Sparrowhawk	NM	VU		✓	
Accipiter brevipes	Levant Sparrowhawk	M	LC	✓		✓
Accipiter soloensis	Chinese Goshawk	M	LC		✓	✓
Accipiter francesiae	Frances's Sparrowhawk	NM	LC	✓		
Accipiter trinotatus	Spot-tailed Goshawk	NM	LC		✓	
Accipiter novaehollandiae	Grey Goshawk	NM	LC		✓	
Accipiter fasciatus	Brown Goshawk	M	LC		✓	
Accipiter melanochlamys	Black-mantled Goshawk	NM	LC		✓	
Accipiter henicogrammus	Moluccan Goshawk	NM	LC		✓	
Accipiter poliocephalus	Grey-headed Goshawk	NM	LC		✓	
Accipiter erythropus	Red-thighed Sparrowhawk	NM	LC	✓		
Accipiter minullus	Little Sparrowhawk	NM	LC	✓		

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Accipiter gularis	Japanese Sparrowhawk	M	LC		✓	✓
Accipiter virgatus	Besra	M	LC		✓	✓
Accipiter nanus	Small Sparrowhawk	NM	NT		✓	
Accipiter erythrauchen	Rufous-necked Sparrowhawk	NM	LC		✓	
Accipiter cirrocephalus	Collared Sparrowhawk	NM	LC		✓	
Accipiter rhodogaster	Vinous-breasted Sparrowhawk	NM	LC		✓	
Accipiter madagascariensis	Madagascar Sparrowhawk	NM	NT	✓		
Accipiter ovampensis	Ovampo Sparrowhawk	M	LC	✓		
Accipiter nisus	Eurasian Sparrowhawk	M	LC	✓	✓	✓
Accipiter rufiventris	Rufous-chested Sparrowhawk	NM	LC	✓		
Accipiter melanoleucus	Black Goshawk	NM	LC	✓		
Accipiter henstii	Henst's Goshawk	NM	NT	✓		
Accipiter gentilis	Northern Goshawk	M	LC		✓	✓
Accipiter meyerianus	Meyer's Goshawk	NM	LC		✓	
Eutriorchis astur	Madagascar Serpent-eagle	NM	EN	✓		
Erythrotriorchis buergersi	Chestnut-shouldered Goshawk	NM	DD		✓	
Megatriorchis doriae	Doria's Goshawk	NM	NT		✓	
Urotriorchis macrourus	Long-tailed Hawk	NM	LC	✓		
Kaupifalco monogrammicus	Lizard Buzzard	NM	LC	✓		
Butastur rufipennis	Grasshopper Buzzard	M	LC	✓		
Butastur teesa	White-eyed Buzzard	NM	LC		✓	✓
Butastur liventer	Rufous-winged Buzzard	NM	LC		✓	✓
Butastur indicus	Grey-faced Buzzard	M	LC		✓	✓
Buteo buteo	Common Buzzard	M	LC	✓	✓	✓
Buteo oreophilus	Mountain Buzzard	M	LC	✓		
Buteo brachypterus	Madagascar Buzzard	NM	LC	✓		
Buteo rufinus	Long-legged Buzzard	M	LC	✓	✓	✓
Buteo hemilasius	Upland Buzzard	M	LC		✓	✓
Buteo lagopus	Rough-legged Hawk	M	LC		✓	✓
Buteo auguralis	Red-necked Buzzard	M	LC	✓		
Buteo augur	Augur Buzzard	NM	LC	✓		
Buteo rufofuscus	Jackal Buzzard	NM	LC	✓		
Harpyopsis novaeguineae	New Guinea Eagle	NM	VU		✓	
Pithecophaga jefferyi	Philippine Eagle	NM	CR		✓	

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Ictinaetus malayensis	Black Eagle	NM	LC		✓	✓
Aquila pomarina	Lesser Spotted Eagle	M	LC	✓		✓
Aquila hastata	Indian Spotted Eagle	NM (BL)	VU		✓	
Aquila clanga	Greater Spotted Eagle	M	VU	✓	✓	✓
Aquila rapax	Tawny Eagle	M (BL)	LC	✓	✓	✓
Aquila nipalensis	Steppe Eagle	M	LC	✓	✓	✓
Aquila adalberti	Spanish Imperial Eagle	M	VU			✓
Aquila heliaca	Eastern Imperial Eagle	M	VU	✓	✓	✓
Aquila gurneyi	Gurney's Eagle	NM	NT		✓	
Aquila chrysaetos	Golden Eagle	M	LC	✓	✓	✓
Aquila audax	Wedge-tailed Eagle	NM	LC		✓	
Aquila verreauxii	Verreaux's Eagle	NM	LC	✓		✓
Aquila wahlbergi	Wahlberg's Eagle	M	LC	✓		
Hieraaetus fasciatus	Bonelli's Eagle	NM	LC	✓	✓	✓
Hieraaetus spilogaster	African Hawk-eagle	NM	LC	✓		
Hieraaetus pennatus	Booted Eagle	M	LC	✓	✓	✓
Hieraaetus weiskei	New Guinea Hawk-eagle	NM	LC		✓	
Hieraaetus ayresii	Ayres's Hawk-eagle	NM	LC	✓		
Hieraaetus kienerii	Rufous-bellied Eagle	NM	LC		✓	✓
Polemaetus bellicosus	Martial Eagle	NM	LC	✓		
Spizaetus africanus	Cassin's Hawk-eagle	NM	LC	✓		
Spizaetus cirrhatus	Changeable Hawk-eagle	NM	LC		✓	
Spizaetus floris	Flores Hawk-eagle	NM	EN		✓	
Spizaetus nipalensis	Mountain Hawk-eagle	M	LC		✓	✓
Spizaetus alboniger	Blyth's Hawk-eagle	NM	LC		✓	
Spizaetus bartelsi	Javan Hawk-eagle	NM	EN		✓	
Spizaetus lanceolatus	Sulawesi Hawk-eagle	NM	LC		✓	
Spizaetus philippensis	Philippine Hawk-eagle	NM	VU		✓	
Spizaetus nanus	Wallace's Hawk-eagle	NM	VU		✓	
Stephanoaetus coronatus	Crowned Hawk-eagle	NM	LC	✓		
Tyto tenebricosa	Sooty Owl	NM	LC		✓	
Tyto inexspectata	Sulawesi Golden Owl	NM	LC		✓	
Tyto nigrobrunnea	Taliabu Masked-owl	NM	LC		✓	
Tyto sororcula	Lesser Masked-owl	NM	LC		✓	
Tyto novaehollandiae	Australian Masked-owl	NM	LC		✓	
Tyto rosenbergii	Sulawesi Owl	NM	LC		✓	

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Tyto soumagnei	Madagascar Red Owl	NM	EN	✓		
Tyto alba	Barn Owl	NM	LC	✓	✓	✓
Tyto capensis	African Grass-owl	NM	LC	✓		
Tyto longimembris	Eastern Grass-owl	NM	LC		✓	✓
Phodilus prigoginei	Congo Bay-owl	NM	EN	✓		
Phodilus badius	Oriental Bay-owl	NM	LC		✓	✓
Otus sagittatus	White-fronted Scops-owl	NM	VU		✓	
Otus rufescens	Reddish Scops-owl	NM	NT		✓	
Otus icterorhynchus	Sandy Scops-owl	NM	LC	✓		
Otus ireneae	Sokoke Scops-owl	NM	EN	✓		
Otus balli	Andaman Scops-owl	NM	NT		✓	
Otus spilocephalus	Mountain Scops-owl	NM	LC		✓	✓
Otus thilohoffmanni	Serendib Scops-owl	NM	EN		✓	
Otus umbra	Simeulue Scops-owl	NM	NT		✓	
Otus angelinae	Javan Scops-owl	NM	VU		✓	
Otus manadensis	Sulawesi Scops-owl	NM	LC		✓	
Otus longicornis	Luzon Scops-owl	NM	NT		✓	
Otus mindorensis	Mindoro Scops-owl	NM	NT		✓	
Otus mirus	Mindanao Scops-owl	NM	NT		✓	
Otus hartlaubi	São Tomé Scops-owl	NM	VU	✓		
Otus brucei	Pallid Scops-owl	M	LC		✓	✓
Otus scops	Common Scops-owl	M	LC	✓	✓	✓
Otus senegalensis	African Scops-owl	NM	LC	✓		
Otus sunia	Oriental Scops-owl	M	LC			✓
Otus alius	Nicobar Scops-owl	NM	DD		✓	
Otus elegans	Elegant Scops-owl	NM	NT		✓	✓
Otus mantananensis	Mantanani Scops-owl	NM	NT		✓	
Otus magicus	Moluccan Scops-owl	NM	LC	✓	✓	
Otus magicus	Moluccan Scops-owl	NM	LC	✓		
Otus alfredi	Flores Scops-owl	NM	EN		✓	
Otus siaoensis	Siau Scops-owl	NM	CR		✓	
Otus enganensis	Enggano Scops-owl	NM	NT		✓	
Otus insularis	Seychelles Scops-owl	NM	EN	✓		
Otus beccarii	Biak Scops-owl	NM	EN		✓	
Otus rutilus	Malagasy Scops-owl	NM	LC	✓		
Otus pembaensis	Pemba Scops-owl	NM	LC	✓		
Otus capnodes	Anjouan Scops-owl	NM	CR	✓		

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Otus madagascariensis	Torotoroka Scops-owl	NM	LC	✓		
Otus mayottensis	Mayotte Scops-owl	NM	LC	✓		
Otus moheliensis	Moheli Scops-owl	NM	CR	✓		
Otus pauliani	Grand Comoro Scops-owl	NM	CR	✓		
Otus brookii	Rajah Scops-owl	NM	LC		✓	
Otus bakkamoena	Collared Scops-owl	NM	LC		✓	✓
Otus mentawi	Mentawai Scops-owl	NM	NT		✓	
Otus fuliginosus	Palawan Scops-owl	NM	NT		✓	
Otus megalotis	Philippine Scops-owl	NM	LC		✓	
Otus silvicola	Wallace's Scops-owl	NM	LC		✓	
Otus leucotis	White-faced Scops-owl	NM	LC	✓		
Mimizuku gurneyi	Giant Scops-owl	NM	VU		✓	
Nyctea scandiaca	Snowy Owl	M	LC		✓	✓
Bubo bubo	Eurasian Eagle-owl	NM	LC		✓	✓
Bubo bengalensis	Rock Eagle-owl	NM	LC		✓	
Bubo ascalaphus	Pharaoh Eagle-owl	NM	LC	✓		
Bubo capensis	Cape Eagle-owl	NM	LC	✓		
Bubo africanus	Spotted Eagle-owl	NM	LC	✓		
Bubo poensis	Fraser's Eagle-owl	NM	LC	✓		
Bubo vosseleri	Usambara Eagle-owl	NM	VU	✓		
Bubo nipalensis	Spot-bellied Eagle-owl	NM	LC		✓	✓
Bubo sumatranus	Barred Eagle-owl	NM	LC		✓	
Bubo shelleyi	Shelley's Eagle-owl	NM	NT	✓		
Bubo lacteus	Giant Eagle-owl	NM	LC	✓		
Bubo coromandus	Dusky Eagle-owl	NM	LC		✓	✓
Bubo leucostictus	Akun Eagle-owl	NM	LC	✓		
Bubo philippensis	Philippine Eagle-owl	NM	VU		✓	
Ketupa blakistoni	Blakiston's Fish-owl	NM	EN			✓
Ketupa zeylonensis	Brown Fish-owl	NM	LC	✓	✓	✓
Ketupa flavipes	Tawny Fish-owl	NM	LC		✓	✓
Ketupa ketupu	Buffy Fish-owl	NM	LC		✓	
Scotopelia peli	Pel's Fishing-owl	NM	LC	✓		
Scotopelia ussheri	Rufous Fishing-owl	NM	EN	✓		
Scotopelia bouvieri	Vermiculated Fishing-owl	NM	LC	✓		
Strix seloputo	Spotted Wood-owl	NM	LC		✓	
Strix ocellata	Mottled Wood-owl	NM	LC		✓	
Strix leptogrammica	Brown Wood-owl	NM	LC		✓	✓

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Strix aluco	Tawny Owl	NM	LC		✓	✓
Strix butleri	Hume's Owl	NM	LC	✓	✓	✓
Strix uralensis	Ural Owl	M	LC			✓
Strix nebulosa	Great Grey Owl	M	LC			✓
Strix woodfordii	African Wood-owl	NM	LC	✓		
Jubula lettii	Maned Owl	NM	LC	✓		
Surnia ulula	Northern Hawk Owl	M	LC			✓
Glaucidium passerinum	Eurasian Pygmy-owl	NM	LC			✓
Glaucidium brodiei	Collared Owlet	NM	LC		✓	✓
Glaucidium perlatum	Pearl-spotted Owlet	NM	LC	✓		
Glaucidium tephronotum	Red-chested Owlet	NM	LC	✓		
Glaucidium sjostedti	Sjostedt's Owlet	NM	LC	✓		
Glaucidium cuculoides	Asian Barred Owlet	NM	LC		✓	✓
Glaucidium castanopterum	Javan Owlet	NM	LC		✓	
Glaucidium radiatum	Jungle Owlet	NM	LC		✓	
Glaucidium castanonotum	Chestnut-backed Owlet	NM	NT		✓	
Glaucidium castaneum	Chestnut Owlet	NM	LC	✓		
Glaucidium capense	African Barred Owlet	NM	LC	✓		
Glaucidium albertinum	Albertine Owlet	NM	VU	✓		
Athene noctua	Little Owl	NM	LC	✓	✓	✓
Athene brama	Spotted Owlet	NM	LC		✓	✓
Heteroglaux blewitti	Forest Owlet	NM	CR		✓	
Aegolius funereus	Boreal Owl	M	LC		✓	✓
Ninox rufa	Rufous Owl	NM	LC		✓	
Ninox connivens	Barking Owl	NM	LC		✓	
Ninox rudolfi	Sumba Boobook	NM	NT		✓	
Ninox novaeseelandiae	Southern Boobook	NM	LC		✓	
Ninox sumbaensis	Little Sumba Hawk-owl	NM	NT		✓	
Ninox scutulata	Brown Hawk-owl	M	LC		✓	✓
Ninox affinis	Andaman Hawk-owl	NM	NT		✓	
Ninox superciliaris	White-browed Hawk-owl	NM	LC	✓		
Ninox philippensis	Philippine Hawk-owl	NM	LC		✓	
Ninox ios	Cinnabar Hawk-owl	NM	VU		✓	
Ninox ochracea	Ochre-bellied Hawk-owl	NM	NT		✓	
Ninox burhani	Togian Hawk-owl	NM	NE		✓	
Ninox squamipila	Moluccan Hawk-owl	NM	LC		✓	

Scientific Name	English Name	Mig	GTS	Afrotropical	Indomalayan	Palearctic
Ninox natalis	Christmas Island Hawk-owl	NM	VU		✓	
Ninox theomacha	Jungle Hawk-owl	NM	LC		✓	
Ninox punctulata	Speckled Hawk-owl	NM	LC		✓	
Uroglaux dimorpha	Papuan Hawk-owl	NM	DD		✓	
Asio otus	Long-eared Owl	M	LC		✓	✓
Asio abyssinicus	Abyssinian Owl	NM	LC	✓		
Asio madagascariensis	Madagascar Owl	NM	LC	✓		
Asio flammeus	Short-eared Owl	M (BL)	LC	✓	✓	✓
Asio capensis	Marsh Owl	NM	LC	✓		✓

Species with migratory status attributed according to BirdLife International's World Bird Database rather than GROMS

Falco pelegrinoides Barbary Falcon

GROMS text: Not listed. Treated as a sub-species in del Hoyo et al (1994). BirdLife lists as a "Full migrant".

Conclusion: Migratory status uncertain, but in the absence of any further information, treated as a migrant in accordance with BirdLife International.

Milvus lineatus Black-eared Kite

GROMS text: None, presumably because treated as subspecies of Milvus migrans by del Hoyo et al. 1994. But Del Hoyo state in text that subspecies lineatus is migratory. BirdLife lists as a "Full migrant".

Conclusion: Migratory (follow WBDB).

Aquila hastata Indian Spotted Eagle

GROMS text: None, presumably because treated as subspecies of Aquila pomarina. BirdLife lists as a non-migrant.

Conclusion: Not migratory (follow WBDB).

Aquila rapax Tawny Eagle

GROMS text: Resident in most areas but perhaps some seasonal movement into more arid areas in SW and NE Africa during the rainy season; also some birds perform seasonal N-S movements in W Africa. Often mixes with flocks of migrant A. nipalensis. Rare vagrant to Bangladesh, NW Thailand and perhaps Sri Lanka. (del Hoyo J Elliott A, Sargatal J (eds) 1994). BirdLife lists as a "Full migrant".

Conclusion: Some populations migratory (follow WBDB).

Asio flammeus Short-eared Owl

GROMS Text: Not listed. BirdLife lists as "Full migrant".

Conclusion: Migratory (GROMS error).

African-Eurasian Countries where Globally Threatened and Near-Threatened Migratory Raptors Occur

Country	Aegypius monachus	Aquila adalberti	Aquila clanga	Aquila heliaca	Circus macrourus	Circus maurus	Falco cherrug	Falco naumanni	Falco vespertinus	Haliaeetus leucoryphus	Haliaeetus pelagicus	Milvus milvus	Total
Afghanistan	1		1	1	1		1	1					**6**
Albania			1		1			1	1			1	**5**
Algeria					1			1	1			1	**4**
Angola					1			1	1				**3**
Armenia	1		1	1	1		1	1	1				**7**
Austria			1	1	1		1	1	1			1	**7**
Azerbaijan	1		1	1	1		1	1	1				**7**
Bahrain					1		1	1					**3**
Bangladesh			1	1	1					1			**4**
Belarus			1		1		1		1			1	**5**
Belgium												1	**1**
Benin					1			1					**2**
Bhutan	1		1	1						1			**4**
Bosnia and Herzegovina			1	1				1	1			1	**5**
Botswana					1	1		1	1				**4**
Bulgaria	1		1	1	1		1	1	1			1	**8**
Burkina Faso					1			1	1				**3**
Burundi					1			1	1				**3**
Cambodia	1		1	1									**3**
Cameroon					1				1				**2**
Cape Verde												1	**1**
Central African Republic					1			1					**2**
Chad			1		1			1	1				**4**
China (mainland)	1		1	1	1		1	1		1	1		**8**
Congo								1					**1**
Congo, Democratic Republic					1			1	1				**3**
Côte dIvoire					1			1	1				**3**
Croatia	1		1	1	1		1	1	1			1	**8**

Country	Aegypius monachus	Aquila adalberti	Aquila clanga	Aquila heliaca	Circus macrourus	Circus maurus	Falco cherrug	Falco naumanni	Falco vespertinus	Haliaeetus leucoryphus	Haliaeetus pelagicus	Milvus milvus	Total
Cyprus	1			1	1		1	1	1				**6**
Czech Republic				1	1		1	1	1			1	**6**
Denmark					1				1			1	**3**
Djibouti			1	1	1			1					**4**
Egypt			1	1	1		1	1	1			1	**7**
Eritrea			1	1	1			1					**4**
Estonia			1						1				**2**
Ethiopia			1	1	1		1	1	1				**6**
Finland			1		1				1				**3**
France			1		1			1	1			1	**5**
Gabon								1					**1**
Gambia					1			1					**2**
Georgia	1		1	1	1			1	1			1	**7**
Germany							1		1			1	**3**
Ghana					1								**1**
Gibraltar (to UK)								1				1	**2**
Greece	1		1	1	1		1	1	1			1	**8**
Guinea								1					**1**
Guinea-Bissau					1								**1**
Hong Kong	1		1	1									**3**
Hungary			1	1			1		1			1	**5**
India	1		1	1	1		1	1		1			**7**
Indonesia			1										**1**
Iran, Islamic Republic	1		1	1	1		1	1	1	1		1	**9**
Iraq	1		1	1	1		1	1	1	1			**8**
Israel	1		1	1	1		1	1	1				**7**
Italy	1		1		1		1	1	1			1	**7**
Japan				1							1		**2**
Jordan				1	1		1	1	1				**5**
Kazakhstan	1		1	1	1		1	1	1	1			**8**
Kenya			1	1	1		1	1	1				**6**
Kuwait			1	1	1		1	1					**5**
Kyrgyzstan	1		1	1	1		1			1			**6**

Country	Aegypius monachus	Aquila adalberti	Aquila clanga	Aquila heliaca	Circus macrourus	Circus maurus	Falco cherrug	Falco naumanni	Falco vespertinus	Haliaeetus leucoryphus	Haliaeetus pelagicus	Milvus milvus	Total
Laos	1		1	1				1					**4**
Latvia			1		1				1			1	**4**
Lebanon	1		1	1	1			1				1	**6**
Lesotho						1		1	1				**3**
Liberia					1			1	1				**3**
Libya					1		1	1	1			1	**5**
Liechtenstein									1			1	**2**
Lithuania			1									1	**2**
Luxembourg												1	**1**
Macao			1	1									**2**
Macedonia, FYR	1		1	1	1			1	1			1	**7**
Malawi					1			1	1				**3**
Malaysia	1		1										**2**
Maldives					1								**1**
Mali					1			1	1				**3**
Malta					1		1	1	1				**4**
Mauritania					1		1	1	1				**4**
Moldova	1		1	1	1		1	1	1			1	**8**
Mongolia	1		1	1	1		1	1		1			**7**
Morocco		1	1					1	1			1	**5**
Mozambique					1			1					**2**
Myanmar	1		1		1			1		1			**5**
Namibia					1	1		1	1				**4**
Nepal	1		1	1	1		1	1		1			**7**
Netherlands												1	**1**
Niger					1			1					**2**
Nigeria					1			1	1				**3**
North Korea	1										1		**2**
Oman			1	1	1		1	1					**5**
Pakistan	1		1	1	1		1	1		1			**7**
Palestinian Authority Territories			1	1	1			1					**4**
Poland			1				1		1			1	**4**

Country	Aegypius monachus	Aquila adalberti	Aquila clanga	Aquila heliaca	Circus macrourus	Circus maurus	Falco cherrug	Falco naumanni	Falco vespertinus	Haliaeetus leucoryphus	Haliaeetus pelagicus	Milvus milvus	Total
Portugal	1	1						1				1	**4**
Qatar			1		1			1					**3**
Romania	1		1	1	1		1	1	1			1	**8**
Russia (Asian)			1	1	1		1	1	1	1	1		**8**
Russia (Central Asian)	1		1	1	1		1	1	1	1			**8**
Russia (European)	1		1	1	1		1	1	1			1	**8**
Rwanda					1			1	1				**3**
Saudi Arabia	1		1	1	1		1	1					**6**
Senegal					1			1	1				**3**
Serbia and Montenegro	1		1	1	1		1	1	1			1	**8**
Sierra Leone					1			1					**2**
Singapore			1	1									**2**
Slovakia			1	1	1		1	1	1			1	**7**
Slovenia	1		1		1			1	1			1	**6**
Somalia					1			1					**2**
South Africa					1	1		1	1				**4**
South Korea	1		1	1							1		**4**
Spain	1	1	1				1	1				1	**6**
Sri Lanka					1								**1**
Sudan	1		1	1	1		1	1	1				**7**
Swaziland					1								**1**
Sweden									1			1	**2**
Switzerland									1			1	**2**
Syria	1		1	1	1		1	1	1				**7**
Taiwan			1	1									**2**
Tajikistan	1						1		1	1			**4**
Tanzania			1	1	1			1	1				**5**
Thailand	1		1	1									**3**
Togo					1			1					**2**
Tunisia					1		1	1	1			1	**5**
Turkey	1		1	1	1		1	1	1			1	**8**
Turkmenistan	1			1			1	1	1	1		1	**7**

Country	Aegypius monachus	Aquila adalberti	Aquila clanga	Aquila heliaca	Circus macrourus	Circus maurus	Falco cherrug	Falco naumanni	Falco vespertinus	Haliaeetus leucoryphus	Haliaeetus pelagicus	Milvus milvus	Total
Uganda					1			1					**2**
Ukraine	1		1	1	1		1	1	1			1	**8**
United Arab Emirates			1	1	1		1	1					**5**
United Kingdom												1	**1**
Uzbekistan	1			1			1	1	1	1			**6**
Vietnam	1		1	1	1								**4**
Yemen			1	1	1		1	1					**5**
Zambia			1		1			1	1				**4**
Zimbabwe					1			1	1				**3**
Total	**47**	**3**	**74**	**62**	**96**	**4**	**53**	**95**	**74**	**17**	**5**	**45**	

Source: BirdLife International World Bird Database, www.birdlife.org (accessed 23 June 2005).

The global and regional status of breeding populations of migratory raptors in Africa and Eurasia with a favourable conservation status

Key

Global Status	CR = Critical EN = Endangered VU = Vulnerable NT = Near Threatened LC = Least Concern
European Species of Conservation Concern (SPEC)	SPEC 1 = Species of Global Conservation Concern (i.e. classified as Globally Threatened, Near Threatened or Data Deficient) SPEC 2 = Species that are concentrated in Europe and have an unfavourable conservation status; SPEC 3 = Species that are not concentrated in Europe but have an unfavourable conservation status. *Status refers to breeding population.*
b	Breeding population
m	only occurs on migration
w	occurs in winter (non-breeding season) and on migration
wss	wintering population in sub-Sahara
European Threat Status	CR = Critical EN = Endangered VU = Vulnerable D = Declining R = Rare H = Depleted S = Secure Codes in brackets indicate that the assessment is provisional
FCS	Favourable Conservation Status (see Annex 2 for definition)
UCS	Unfavourable Conservation Status (see Annex 2 for definition)
UCS qualifying criteria for Africa, Asia and the Middle East	d = declining in numbers or range r = rare or depleted population h = threatened by habitat loss
?	Unknown status, or uncertain status if combined with UCS or FCS
?(d-e)	Some evidence of declines in south and east Asia (see Annex 8), but insufficient data are available over the majority of the species' range to ascertain its overall status

Species	English Name	Global Status	European SPEC	ETS	Asia*	M-E	Africa
Falco alopex	Fox Kestrel	LC	–	–	–	–	FC?
Falco amurensis	Amur Falcon	LC	–	–	FC?	–	w
Falco concolor	Sooty Falcon	LC	–	–	?	FC?	FC?
Falco columbarius	Merlin	LC	N	(S)	?	w	w
Falco subbuteo	Eurasian Hobby	LC	N	(S)	?	m	w
Falco severus	Oriental Hobby	LC	–	–	?	–	–
Falco peregrinus	Peregrine Falcon	LC	N	S	FC?	?	?
Falco pelegrinoides	Barbary Falcon	LC	N	S	–	?	?
Aviceda cuculoides	African Baza	LC	–	–	–	–	?
Aviceda jerdoni	Jerdon's Baza	LC	–	–	?	–	–
Aviceda leuphotes	Black Baza	LC	–	–	FC	–	–
Pernis apivorus	European Honey-buzzard	LC	N	(S)	?	m	w
Gyps fulvus	Griffon Vulture	LC	N	S	FC?	?	?
Circus aeruginosus	Western Marsh-harrier	LC	N	S	?(d–e)	m	m
Circus assimilis	Spotted Harrier	LC	–	–	?	–	–
Circus melanoleucos	Pied Harrier	LC	–	–	?	–	–
Circus pygargus	Montagu's Harrier	LC	N	S	?(d-e)	m	b? w
Accipiter badius	Shikra	LC	N	(S)	?	m	FC?
Accipiter soloensis	Chinese Goshawk	LC	–	–	FC	–	–
Accipiter gularis	Japanese Sparrowhawk	LC	–	–	FC	–	–
Accipiter virgatus	Besra	LC	–	–	?	–	–
Accipiter ovampensis	Ovampo Sparrowhawk	LC	–	–	–	–	FC?
Accipiter nisus	Eurasian Sparrowhawk	LC	N	S	FC	w	b? wss
Accipiter gentilis	Northern Goshawk	LC	N	S	?(d-e)	–	?
Butastur rufipennis	Grasshopper Buzzard	LC	–	–	–	–	?
Buteo buteo	Common Buzzard	LC	N	S	FC?	w	w
Buteo oreophilus	Mountain Buzzard	LC	–	–	–	–	FC?
Buteo lagopus	Rough-legged Hawk	LC	N	(S)	FC?	–	–
Buteo auguralis	Red-necked Buzzard	LC	–	–	–	–	FC?
Aquila wahlbergi	Wahlberg's Eagle	LC	–	–	–	–	FC?
Spizaetus nipalensis	Mountain Hawk-eagle	LC	–	–	?	–	–
Otus sunia	Oriental Scops-owl	LC	–	–	?	–	–
Strix uralensis	Ural Owl	LC	N	(S)	?	–	–
Strix nebulosa	Great Grey Owl	LC	N	(S)	?	–	–
Surnia ulula	Northern Hawk Owl	LC	N	(S)	?	–	–
Aegolius funereus	Boreal Owl	LC	N	(S)	?	–	–
Ninox scutulata	Brown Hawk-owl	LC	–	–	?	–	–
Asio otus	Long-eared Owl	LC	N	(S)	?	?	?

Important Birds Areas in Europe, the Middle East and Africa that are Significant for Passage Raptors and their Protection Status

This should be treated as a minimum list of internationally important areas requiring protection for migratory raptors. Other sites of equal or greater importance may be discovered with further knowledge and appropriate protection measures will also be required for nationally and regionally important sites.

Key

X	Sites qualify according to the criteria of that column
Criteria	A1 = The site regularly holds significant numbers of Globally Threatened species, or other species of global conservation concern A4iv = Global importance 'bottleneck' site where at least 20,000 storks, raptors, or cranes pass during spring or autumn migration B4iv = European (or regional) importance 'bottleneck' site where over 5,000 storks, or over 3,000 raptors or cranes regularly pass on spring or autumn migration
Protection levels (where known)	H = High P = Partial L = Low N = None ? = uncertain blank = not mentioned, and therefore probably none
Protection type (where documented)	NR = Nature Reserve NP = National Park NGR = National Game Reserve WR = Wildlife Refuge SPA = EU Special Protection Area Zap = *Zapovednik* (strict nature reserve) BR = Biosphere Reserve R = Ramsar Site WHR = World Heritage Site

IBAs in Europe, Africa and the Middle East

These include sites that qualify according to global and regional criteria for Globally Threatened Species and congregations of migratory birds

Country/IBA International name	Qualifying level and criteria			National protection		International protection	
	Global spp (A1)	Global (A4iv)	Regional (B4iv)	Level	Type	Level	Type
Bulgaria							
Atanasovo lake	X	X	X	H	NR	P	R
Mandra-Poda complex			X	P		N	
Denmark							
Gilleleje area			X	N		N	
Hellebæk			X	N		N	
Korshage, Hundested and surrounding sea area			X	L		H	SPA
Marstal Bugt and the coast of south-west Langeland			X	L		H	SPA
Skagen			X	N		N	
Stevns		X	X	N		N	
Djibouti							
Kadda Guéïni – Doumêra		X	---	N		N	
Egypt							
Ain Sukhna	X	X	---	N		N	
El Qa plain	X	X	---	N		N	
Gebel El Zeit	X	X	---	N		N	
Ras Mohammed National Park	X	X	---	H	NP	N	
Suez	X	X	---	N		N	
Finland							
Merenkurkku archipelago			X	N		P	R
France							
Basses Corbières		X	X	L		N	
Col de l'Escrinet		X	X	N		N	
Col de Lizarrieta			X	N		N	
Etangs de Leucate et Lapalme		X	X	L		N	
Etangs Narbonnais			X	P		N	
Gorges de la Dordogne			X	N		N	

Country/IBA International name	Qualifying level and criteria			National protection		International protection	
	Global spp (A1)	Global (A4iv)	Regional (B4iv)	Level	Type	Level	Type
Haute chaîne du Jura: défilé de l'écluse, Etournel et Mont Vuache		X	X	H		N	
Haute Soule : Forêt d'Irraty, Organbidexka et Pic des Escaliers		X	X	N		N	
Hautes Corbières			X	L		N	
Hautes garrigues du Montpellierais			X	N		N	
Massif du Canigou-Carança		X	X	P		P	
Montagne de la Clape			X	N		P	SPA
Montagne de la Serre			X	N		N	
Monts et Plomb du Cantal			X	L		P	SPA
Pointe de Grave			X	N		N	
Val d'Allier : Saint-Yorre-Joze			X	P		N	
Val de Drôme: Les Ramières-printegarde			X	P		P	SPA
Vallée de la Nive des Aldudes-Col de Lindux		X	X	N		N	
Georgia							
Kolkheti		X	X	H	NP	H	R
Meskheti	X		X	P	NR	N	
Gibraltar (to UK)							
Rock of Gibraltar	X	X	X	H		H	
Greece							
North, east and south Kithira island			X	P	WR	L	SPA
Iraq							
Samara dam			X	N		N	
Israel							
Cliffs of Zin and the Negev highlands			X	P		N	
Hula valley	X	X	X	H	NR	N	
Jezre'el, Harod and Bet She'an valleys	X	X	X	L	NR	N	
Judean desert	X		X	H	NR NP	N	
Judean foothills	X		X	N		N	
Northern Arava valley		X	X	P	NR	N	
Northern lower Jordan valley		X	X	P	NR	N	

Country/IBA International name	Qualifying level and criteria			National protection		International protection	
	Global spp (A1)	Global (A4iv)	Regional (B4iv)	Level	Type	Level	Type
Southern Arava valley and Elat mountains	X	X	X	P	NR	N	
Western Negev	X	X	X	P	NR	N	
Italy							
Aspromonte			X	P	NP	N	
Cape Otranto			X	N		N	
Costa Viola	X		X	N		N	
Maritime Alps			X	P	NR NP	N	
Mount Beigua			X	P	NP	N	
Mount Conero			X	H	NP	N	
Mount Grappa			X	N		N	
Peloritani mountains		X	X	N		P	SPA
Piave river			X	N		N	
Jordan							
Aqaba mountains	?	X	X	N		N	
Jordan valley			X	N		N	
Petra area			X	P	NP	L	WHR
Wadi Dana – Finan	X	X	X	H	NR	N	
Wadi Mujib			X	H	NR	N	
Kuwait							
Al-Jahra Pool Nature Reserve	X		X	P	NR	N	
Latvia							
Slitere Nature Reserve		X	X	H	NR	N	
Lebanon							
Ammiq swamp			X	H	NR	H	R
Lithuania							
Kuronian spit		?	X	H	NP	N	
Malta							
Buskett and Wied il-Luq			X	H	NR	N	
Morocco							
Cap Spartel – Perdicaris		X	---	H		N	
Jbel Moussa		X	---	N		N	

Country/IBA International name	Qualifying level and criteria			National protection		International protection	
	Global spp (A1)	Global (A4iv)	Regional (B4iv)	Level	Type	Level	Type
Palestinian Authority Territories							
Jericho	?	?	X	N		N	
Northern Lower Jordan Valley		X	X	P	NR	N	
Portugal							
South-west coast of Portugal			X	H	NP	H	SPA
Russia (European)							
Caucasus Biosphere Reserve			X	H	Z	H	BR
Chudsko-Pskovski Lake and adjacent areas		X	X	P	Z	P	R
Delta of the River Don	X		X	P	Z	N	
Irendyk ridge		X	X	N		N	
Teberdinski Nature Reserve	X		X	H	Z	N	
Saudi Arabia							
Taif escarpment			X	N		N	
Wadi Jawwah	X		X	N		N	
Wadi Rabigh springs			X	N		N	
Spain							
Bujeo, Ojén, del Niño and Blanquilla mountain ranges		X	X	H	NP	H	SPA
Cabras, Aljibe and Montecoche mountain range		X	X	H	NP	H	SPA
Cadí mountains			X	P	NGR NP	P	SPA
Ceuta	X	X	X	N		N	
De la Plata mountain range		X	X	N		N	
Guadalquivir marshes		X	X	P	NP	P	SPA R BR WHS
La Janda		X	X	N		N	
Roncesvalles-Irati-Abodi mountain range			X	L	NR	P	SPA
Tarifa	X	X	X	L		N	
Sweden							
Bay of Skälderviken			X	P	NR	P	SPA
Falsterbo-Bay of Foteviken		X	X	P	NR	P	SPA R

Country/IBA International name	Qualifying level and criteria			National protection		International protection	
	Global spp (A1)	Global (A4iv)	Regional (B4iv)	Level	Type	Level	Type
Switzerland							
Pre-alpine region of Gurnigel			X	P		N	
Syria							
Jabal Slenfeh			X	N		N	
Tunisia							
Djebel el Haouaria		X	---	P	HR	N	
Turkey							
Bosporus		X	X	P	NR	N	
North-east Turkey		X	X	P	NR NP	N	
Nur mountains		X	X	P	NR	N	
Yemen							
Al-Kadan area	X		X	N		N	
Bab al-Mandab – Mawza		X	X	N		N	
Mafraq al-Mukha	X		X	N		N	
Wadi Rijaf			X	N		N	

Source: BirdLife International World Bird Database (accessed March 2005).

IBAs in Asia

These are sites that qualify according to global criteria for congregations of migratory birds

Country/territory and IBA International name	Protection status*
China	
Beidaihe	Partially protected
Changdao Islands	Protected
Changtang plateau	Protected
Laotieshan Nature Reserve	Protected
Indonesia	
Bali Barat	Partially protected
Pegunungan Dieng	Unprotected
Telaga Warna-Cibulao	Partially protected
Japan	
Miyako islands	Partially protected
Tsushima islands	Partially protected
Russia	
South Baikal migratory corridor	Protected (World Heritage Site)
Thailand	
Prince Chumphon Park Wildlife Sanctuary (north and south sectors)	Protected
Tha Yang	Unprotected
Taiwan, Province of China	
Kenting National Park	Protected
North Section of Bagua Mountain	Unprotected

Source: BirdLife International WBDB (accessed January 2007) & Mike Crosby pers comm.

Note: * Levels and types of protection are not consistently distinguished in IBA data for Asia.

Multilateral Environmental Agreements with Provisions Applicable to the Conservation of African-Eurasian Migratory Raptors

EUROPEAN LANDSCAPE CONVENTION

Full title	Council of Europe European Landscape Convention (Florence 2000)
Web page	http://www.coe.int/T/E/Cultural_Co-operation/Environment/Landscape/
No. Signatories	26

Relevant provisions

Article 3 – Aims

The aims of this Convention are to promote landscape protection, management and planning, and to organise European co-operation on landscape issues.

Article 5 – General measures

Each Party undertakes :

a. to recognise landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity;

d. to integrate landscape into its regional and town planning policies and in its cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape.

Article 9 – Transfrontier landscapes

The Signatories shall encourage transfrontier co-operation on local and regional level and, wherever necessary, prepare and implement joint landscape programmes.

Remarks

The European Landscape Convention is a relatively new convention, having come into force only in March 2004, and has just 26 Signatories. Thus, it is too early to judge whether it will have the desired effect for the landscape-scale habitat protection that would benefit raptors. On the other hand, there are clearly opportunities for using this convention as it matures.

CONVENTION ON BIOLOGICAL DIVERSITY

Full title	UN Convention on Biological Diversity (Rio de Janeiro 1992)
Web page	http://www.biodiv.org/
No. Parties	190

Relevant provisions

Article 1 – Objectives

The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.

Article 6 – General Measures for Conservation and Sustainable Use

Each Contracting Party shall, in accordance with its particular conditions and capabilities:

(a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and

(b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

Article 8 – In-situ Conservation

Each Contracting Party shall, as far as possible and as appropriate:

(d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;

(f) Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies;

2010 Biodiversity Target

In 2002, the 6th Conference of the Parties adopted a Strategic Plan in which Parties committed themselves to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth. This target has been widely re-affirmed at various subsequent intergovernmental conferences, and indeed in Europe was strengthened by the Fifth Ministerial Conference on Environment in Europe held in Kiev (Ukraine) in 2003 to "halt" the loss of biodiversity by 2010.

The Pan-European Biological and Landscape Diversity Strategy

PEBLDS is the Pan-European response to the Convention on Biological Diversity (CBD) that seeks to stop and reverse the degradation of biological and landscape diversity values in Europe. A major tool in this regard is the development of the *Pan-European Ecological Network* (PEEN), that contributes to achieving the main goals of the Strategy by ensuring that: a full range of ecosystems, habitats, species and their genetic diversity and landscapes of European importance are conserved; habitats are large enough to place species in a

favourable conservation status; there are sufficient opportunities for the dispersal and migrations of species; and damaged elements of the key systems are restored and the systems are buffered from potential threats. PEEN intends to link core areas physically through the restoration or preservation of corridors. PEBLDS was endorsed in 1995 by 53 countries including all the countries participating in this project. It has a Secretariat provided jointly between the Council of Europe and UN Economic Commission for Europe.

National Biodiversity Strategies and Action Plans

Article 6 creates an obligation for national biodiversity planning. The development and adoption of a national biodiversity strategy reflects how a country intends to fulfil the objectives of the Convention in light of specific national circumstances, and the related action plans constitute the sequence of steps to be taken to meet these goals. The EU has adopted a biodiversity strategy for the whole of its territory, and the vast majority of other countries in Africa and Eurasia have also prepared BSAPs as this is a perquisite for project funding by the Global Environment Facility.

CLIMATE CHANGE CONVENTION

Full title	UN Framework Convention on Climate Change (New York 1992)
Web page	http://unfccc.int/2860.php
No. Parties	194

Relevant provisions

Article 2 – Objective

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

Article 4 – Commitments

1. All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall:

(d) Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all 11 greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems;

(e) Cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods;

Kyoto Protocol

The 1997 Kyoto Protocol that came into force in February 2005 shares the Convention's objective, principles and institutions, but significantly strengthens the Convention by committing Parties from developed countries to individual, legally-binding targets to limit or reduce their greenhouse gas emissions. These add up to a total cut in greenhouse-gas emissions of at least 5% from 1990 levels in the commitment period 2008-2012. This has prompted a number of initiatives including carbon sequestration through investing in "sinks" such as (re-)afforestation or arable reversion to grassland. Such schemes have the potential for expanding the habitat available for forest- and steppe-dwelling raptors.

CONVENTION TO COMBAT DESERTIFICATION

Full title	UN Convention to Combat Desertification (Paris 1994)
Web page	http://www.unccd.int/main.php
No. Parties	191

Relevant provisions

Article 2 – Objective

1. The objective of this Convention is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas.

2. Achieving this objective will involve long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level.

Article 7 – Priority for Africa

In implementing this Convention, the Parties shall give priority to affected African country Parties, in the light of the particular situation prevailing in that region, while not neglecting affected developing country Parties in other regions.

Article 9 – Basic approach

1. In carrying out their obligations pursuant to article 5, affected developing country Parties and any other affected country Party in the framework of its regional implementation annex or, otherwise, that has notified the Permanent Secretariat in writing of its intention to prepare a national action programme, shall, as appropriate, prepare, make public and implement national action programmes, utilizing and building, to the extent possible, on existing relevant successful plans and programmes, and sub-regional and regional action programmes, as the central element of the strategy to combat desertification and mitigate the effects of drought. Such programmes shall be updated through a continuing participatory process on the basis of lessons from field action, as well as the results of research. The preparation of national action programmes shall be closely interlinked with other efforts to formulate national policies for sustainable development.

National action programmes

Parties implement the Convention by developing and carrying out national, sub-regional, and regional action programmes (Article 9). Criteria for preparing these programmes are detailed in the treaty's five "regional implementation annexes": Africa (considered a priority under Article 7 because that is where desertification is most severe), Asia, Latin America and the Caribbean, the Northern Mediterranean, and Central and Eastern Europe. The Convention states that these programmes must adopt a democratic, bottom-up approach. They should emphasize popular participation and the creation of an "enabling environment" designed to allow local people to help themselves to reverse land degradation. However, governments remain responsible for creating this enabling environment and must make politically sensitive changes, such as decentralising authority, improving land-tenure systems, and empowering women, farmers, and pastoralists. They should also permit non-governmental organizations to play a strong role in preparing and implementing the action programmes. Between 2000 and 2004, 32 African countries had prepared NAPs. In addition there are four sub-regional programmes, including one for the Sahel where many migratory raptors winter, and thematic programme networks for:

- Integrated management of international river, lake and hydro-geological basins.
- Promotion of agroforestry and soil conservation.
- Rational use of rangelands and promotion of fodder crops development.
- Ecological monitoring, natural resources mapping, remote sensing and early warning systems.
- Promotion of new and renewable energy sources and technologies.
- Promotion of sustainable agricultural farming systems.

Between 1997 and 2005, 16 SE Asian countries had prepared NAPs.[12] In addition there is a Regional Action Programme for Asia, with two sub-regional action programmes for West Asia and Central Asia. Thematic programme networks have been established for:

- Desertification monitoring and assessment
- Agroforestry and soil conservation in arid, semi-arid and dry sub-humid areas
- Rangeland management in arid areas including the fixation of sand dunes
- Water resources management for agriculture in arid, semi-arid and dry sub-humid areas
- Strengthening capacities for drought impact mitigating and desertification combating
- Assistance for the implementation of integrated local area development programmes (LAPDs) initiatives

[12] China, India, Indonesia, Kazakhstan, Kyrgyzstan, Laos, Mongolia, Nepal, Pakistan, Philippines, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Uzbekistan, Vietnam

EC BIRDS DIRECTIVE

Full title	Council Directive on the Conservation of Wild Birds (79/409/EEC)
Web page	http://europa.eu.int/comm/environment/nature/
No. Parties	27

Relevant provisions

Article 1

1. This directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the member states to which the treaty applies. It covers the protection, management and control of these species and lays down rules for their exploitation.

Article 2

Member states shall take the requisite measures to maintain the population of the species referred to in Article 1 at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level.

Article 3

1. In the light of the requirements referred to in Article 2, member states shall take the requisite measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Article 1.

Article 4

1. The species mentioned in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. In this connection, account shall be taken of:

(a) species in danger of extinction;

(b) species vulnerable to specific changes in their habitat;

(c) species considered rare because of small populations or restricted local distribution;

(d) other species requiring particular attention for reasons of the specific nature of their habitat.

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land area where this Directive applies.

2. Member states shall take similar measures for regularly occurring migratory species not listed in Annex I, bearing in mind their need for protection in the geographical sea and land area where this directive applies, as regards their breeding, moulting and wintering

areas and staging posts along their migration routes. to this end, member states shall pay particular attention to the protection of wetlands and particularly to wetlands of international importance.

Remarks

The Birds Directive also establishes a general system of bird species protection under Article 5 (including their eggs and nests), prohibits trade in live or dead birds (Article 6), and bans large-scale or non-selective means of capture or killing (Article 8).

Stroud (2003) points out that a large proportion of European diurnal raptors (33 of 39 falconiforms) and owls (8 of 13) are listed on Annex I under Article 4 of the Directive. Of the remaining species, most are regular migrants and thus require (where site-based protection is an appropriate conservation measure) the classification of SPAs under Article 4.2. The only non-Annex I listed species which are sedentary are some populations of Northern Goshawk (*Accipiter. gentilis buteoides* and *A. g. gentilis*), sedentary populations of Eurasian Sparrowhawk (*Accipiter n. nisus*), island and central mainland Europe races of Common Buzzard (*Buteo buteo*), and island races of Common Kestrel (*Falco tinnunculus alexandri, neglectus, canariensis* and *dacotiae*).

EC HABITATS DIRECTIVE

Full title	Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC)
Web page	http://europa.eu.int/comm/environment/nature/
No. Parties	27

Relevant provisions

Article 2

1. The aim of this Directive shall be to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies.

2. Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest.

3. Measures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics.

Article 3

1. A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range.

The Natura 2000 network shall include the special protection areas classified by the Member States pursuant to [the Birds] Directive 79/409/EEC.

2. Each Member State shall contribute to the creation of Natura 2000 in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

3. Where they consider it necessary, Member States shall endeavour to improve the ecological coherence of Natura 2000 by maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora, as referred to in Article 10.

Article 6

2. Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive.

Article 10

Member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora.

Remarks

The Habitats Directive largely implements, in the EU territory, the provisions of the Bern Convention (see below), although it has the added strengths of an enforcement mechanism through the European Court of Justice, and co-funding provisions for site management. It elaborates on the site protection system established under the Birds Directive, in particular the concept of an EU-wide ecological network of sites known as Natura 2000.

BERN CONVENTION

Full title	Council of Europe Convention on the Conservation of European Wildlife and Natural Habitats (Bern 1979)
Web page	http://www.coe.int/t/e/Cultural_Co-operation/Environment/Nature_and_biological_diversity/Nature_protection/
No. Parties	45 (including Burkino Faso, Morocco, Senegal, Tunisia; but Russia and Belarus are not Parties)

Relevant provisions

Article 1

1 The aims of this Convention are to conserve wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the co-operation of several States, and to promote such co-operation.

2 Particular emphasis is given to endangered and vulnerable species, including endangered and vulnerable migratory species.

Article 2

The Contracting Parties shall take requisite measures to maintain the population of wild flora and fauna at, or adapt it to, a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements and the needs of sub-species, varieties or forms at risk locally.

Article 4

1 Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in Appendices I and II, and the conservation of endangered natural habitats.

3 The Contracting Parties undertake to give special attention to the protection of areas that are of importance for the migratory species specified in Appendices II and III and which are appropriately situated in relation to migration routes, as wintering, staging, feeding, breeding or moulting areas.

Article 6

Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the special protection of the wild fauna species specified in Appendix II.

Article 10

1 The Contracting Parties undertake, in addition to the measures specified in Articles 4, 6, 7 and 8, to co-ordinate their efforts for the protection of the migratory species specified in Appendices II and III whose range extends into their territories.

Remarks

Annex II of the Bern Convention covers strictly protected fauna species, and includes all species of falconiforms and owls, with no further discrimination of species or populations. As part of its work under the Bern Convention the Council of Europe launched The Emerald Network (Natura 2000 in the EU) to create an ecological network made up of "areas of special conservation interest".

AFRICAN CONVENTION

Full title	African Convention on the Conservation of Nature and Natural Resources (Algiers 1968)
Web page	http://www.africa-union.org/home/Welcome.htm [Official Documents]
No. Parties	30

Relevant provisions

Article VII – Faunal Resources

1. The Contracting States shall ensure conservation, wise use and development of faunal resources and their environment, within the framework of land-use planning and of economic and social development. Management shall be carried out in accordance with plans based on scientific principles, and to that end the Contracting States shall:

(a) manage wildlife populations inside designated areas according to the objectives of such areas and also manage exploitable wildlife populations outside such areas for an optimum sustained yield, compatible with and complementary to other land uses.

Article VIII – Protected Species

The Contracting States recognize that it is important and urgent to accord a special protection to those animal and plant species that are threatened with extinction, or which may become so, and to the habitat necessary to their survival. Where such a species is represented only in the territory of one Contracting State, that State has a particular responsibility for its protection. These species which are, or may be listed, according to the degree of protection that shall be given to them are placed in Class A or B of the Annex to this Convention, and shall be protected by Contracting States as follows:

(a) species in Class A shall be totally protected throughout the entire territory of the Contracting States; the hunting, killing, capture or collection of specimens shall be permitted only on the authorization in each case of the highest competent authority and only if required in the national interest or for scientific purposes; and

(b) species in Class B shall be totally protected, but may be hunted, killed, captured or collected under special authorization granted by the competent authority.

Article X – Conservation Areas

1. The Contracting States shall maintain and extend where appropriate, within their territory and where applicable in their territorial waters, the Conservation areas existing at the time of entry into force of the present convention and, preferably within the framework of land use planning programmes, assess the necessity of establishing additional conservation areas in order to:

(a) protect those ecosystems which are most representative of and particularly those which are in any respect peculiar to their territories;

(b) ensure conservation of all species and more particularly of those listed or may be listed in the annex to this convention.

Remarks

Annex A of the Convention includes all vultures, while Annex B covers all raptors. It is not clear how actively the Convention is applied internationally; there are no provisions in it for regular meetings of Parties.

In July 2003, in Mozambique, the members of African Union adopted a revised text of the Convention to bring it more in line with recent international conventions such as CBD. It also defines different types of conservation areas. It will enter in to force with the accession of the 15th party – at the time of writing this had not been achieved.

ASEAN AGREEMENT ON CONSERVATION

Full title: ASEAN Agreement on the Conservation of Nature and Natural Resources (Kuala Lumpur 1985)

Web page: www.aseansec.org/6080.htm

No. Signatories: 6 (Cambodia, Indonesia, Myanmar, Philippines, Thailand, Viet Nam)

Relevant Provisions

Article 3 – Species – Genetic Diversity

2. [The Contracting Parties] shall adopt appropriate measures to conserve animal and plant species whether terrestrial, marine and freshwater, and more specifically:

(a) conserve natural, terrestrial, freshwater and coastal or marine habitats;

(c) protect endangered species;

(e) take all measures in their power to prevent the extinction of any species or sub-species.

3. In order to fulfil the aims of the preceding paragraph of this Article the Contracting Parties shall, in particular, endeavour to:

(a) create and maintain protected areas;

(b) regulate the taking of species and prohibit unselective taking methods;

Article 5 Species – Endangered and Endemic

1. Appendix 1 to this Agreement shall list endangered species recognized by the Contracting Parties as of prime importance to the Region and deserving special attention. The Appendix shall be adopted by a meeting of the Contracting Parties. Accordingly, Contracting Parties shall, wherever possible:

(a) prohibit the taking of these species, except for exceptional circumstances by special allowance from the designated authorities of the Contracting Parties;

(b) regulate the trade in and possession of specimens and products of those species accordingly;

(c) especially protect habitat of those species by ensuring that sufficient portions are included in protected areas.

(d) take all other necessary measures to improve their conservation status, and restore their populations to the highest possible level.

Article 13 – Protected Areas

1. The Contracting Parties shall as appropriate establish, in areas under their jurisdiction, terrestrial, freshwater, coastal or marine protection areas for the purpose of safeguarding:
– the ecological and biological processes essential to the functioning of the ecosystems of the Region;

– representative samples of all types of ecosystem of the Region;

– satisfactory population levels for the largest possible number of species of fauna and flora belonging to those ecosystems;

– areas of particular importance because of their scientific, educational, aesthetic, or cultural interest.

2. They shall, in particular, take all measures possible in their power to preserve those areas which are of an exceptional character and are peculiar to their country or the Region as well as those which constitute the critical habitats of endangered or rare species, of species that are endemic to a small area and of species that migrate between countries of Contracting Parties.

Article 15 – Scientific Research

The Contracting Parties shall individually or in cooperation with other Contracting Parties or appropriate international organizations, promote and, whenever possible, support scientific and technical programmes of relevance to the conservation and management of natural resources, including monitoring research, the exchange of technical information and the evaluation of results.

Article 18 – Co-Operative Activities

1. The Contracting Parties shall co-operate together and with the competent international organizations, with a view to co-ordinating their activities in the field of conservation of nature and management of natural resources and assisting each other in fulfilling their obligations under this Agreement.

2. To that effect, they shall endeavour:

(a) to collaborate in monitoring activities;

(b) to the greatest extent possible, co-ordinate their research activities;

(c) to use comparable or standardized research techniques and procedures with a view to obtaining comparable data;

(d) to exchange appropriate scientific and technical data, information and experience, on a regular basis;

(e) whenever appropriate, to consult and assist each other with regard to measures for the implementation of this Agreement.

3. In applying the principles of co-operation and co-ordination set forth above, the Contracting Parties shall forward to the Secretariat:

(a) information of assistance in the monitoring of the biological status of the natural living resources of the Region;

(b) information, including reports and publications of a scientific, administrative or legal nature, and in particular information on:

– measures taken by the Parties in pursuance of the provisions of this Agreement;

– the status of species included in Appendix 1;

– any other matter to which the Conference of the Parties may give special priority.

Appendix 1 – List of Endangered Species

Raptors included in the Appendix (those in bold are considered in this assessment report):

Accipiter gularis	**Japanese lesser sparrow hawk**
Accipiter nisus	**European sparrow hawk**
Ichtyophaga ichtyaetus	Grey-headed fishing eagle
Microhierax caerulescens	Common falconet
Mimizuki gurneyi	Giant scops owl
Otus brookei	Rajah's scops owl
Otus spilocephalus	Mountain scops owl
Spizaetus philippinensis	Philippine hawk eagle
Tyto alba	Common barn owl

Remarks

This Agreement was developed by ASEAN during the early 1980s and is among the few regional MEAs set up to date (others deal with haze control and access to genetic resources). It was signed by all six of the then ASEAN members (Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand) on 9 July 1985. However, all the six signatory member states must ratify the Agreement before it can enter into force, and at present only three have done so. Accordingly, the Agreement is not operational at present and indeed may never become so (K-L Koh, pers. Comm.) as some ASEAN members now regard the Agreement as superseded by more recent global treaties. This seems a pity since the provisions of the Agreement as demonstrated above and further discussed by Koh (1995)[13] could potentially lend strong support for the conservation of migratory raptors in SE Asia.

[13] Koh, K.L. 2005 ASEAN Agreement on the Conservation of Nature and Natural Resources, 1985: A Study in Environmental Governance. In Diane Pansky (ed.) *Governance Stream of the Vth World Parks Congress (Durban, South Africa).* Parks Canada and IUCN/WCPA, Ottawa, Canada. Available at: law.nus.edu.sg/apcel/publications/koh_kheng_lian.htm

RAMSAR CONVENTION

Full title	Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar 1971)
Web page	www.ramsar.org
No. Parties	154

Relevant provisions

Article 2

Each Contracting Party shall designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance.

Article 3

The Contracting Parties shall formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory.

Article 4

Each Contracting Party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their wardening.

Remarks

The Ramsar Convention takes a broad approach in determining the wetlands which come under its aegis. Under the text of the Convention, wetlands are defined as: areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres. Thus, the coverage of the Convention extends to a wide variety of habitat types, including rivers and lakes, coastal lagoons, mangroves, and peatlands, as well as human-made wetlands such as fish ponds, irrigated agricultural land, salt pans, reservoirs, gravel pits, and canals. At least seven of the species of migratory raptors covered in this report are heavily dependent on wetlands for hunting and/or breeding, and the designation and protection of Ramsar Sites therefore assists their conservation.

CITES

Full title	Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington 1973)
Web page	www.cites.org
No. Parties	169

Relevant provisions

Article II – Fundamental Principles

1. Appendix I shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances.

2. Appendix II shall include:

(a) all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival; and

(b) other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control.

3. Appendix III shall include all species which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the co-operation of other Parties in the control of trade.

Remarks

Annex I of CITES includes the following species considered in this review: Spanish imperial eagle *Aquila adalberti,* imperial eagle *A. heliaca, w*hite-tailed eagle *Haliaeetus albicilla,* Barbary falcon *F. pelegrinoides,* and peregrine falcon *F. peregrinus*. All the rest are listed in Annex II and therefore fall under the provisions for issuing export and import licences. In principle, this means that the trapping and export of species used in falconry should be regulated in a way that does not compromise their conservation status.

BONN CONVENTION

Full title	Convention on the Conservation of Migratory Species of Wild Animals (Bonn 1979)
Web page	http://www.cms.int/
No. Parties	101

Relevant provisions

Article II – Fundamental Principles

1. The Parties acknowledge the importance of migratory species being conserved and of Range States agreeing to take action to this end whenever possible and appropriate, paying special attention to migratory species the conservation status of which is unfavourable, and taking individually or in co-operation appropriate and necessary steps to conserve such species and their habitat.

3. In particular, the Parties:

a) should promote, co-operate in and support research relating to migratory species;

b) shall endeavour to provide immediate protection for migratory species included in Appendix I; and

c) shall endeavour to conclude Agreements covering the conservation and management of migratory species included in Appendix II.

Article III – Endangered Migratory Species: Appendix I

4. Parties that are Range States of a migratory species listed in Appendix I shall endeavour:

a) to conserve and, where feasible and appropriate, restore those habitats of the species which are of importance in removing the species from danger of extinction;

b) to prevent, remove, compensate for or minimize, as appropriate, the adverse effects of activities or obstacles that seriously impede or prevent the migration of the species; and

c) to the extent feasible and appropriate, to prevent, reduce or control factors that are endangering or are likely to further endanger the species, including strictly controlling the introduction of, or controlling or eliminating, already introduced exotic species.

5. Parties that are Range States of a migratory species listed in Appendix I shall prohibit the taking of animals belonging to such species.

Article IV – Migratory Species to be the Subject of Agreements: Appendix II

1. Appendix II shall list migratory species which have an unfavourable conservation status and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement.

3. Parties that are Range States of migratory species listed in Appendix II shall endeavour to conclude Agreements where these should benefit the species and should give priority to those species in an unfavourable conservation status.

Article V – Guidelines for Agreements

1. The object of each Agreement shall be to restore the migratory species concerned to a favourable conservation status or to maintain it in such a status. Each Agreement should deal with those aspects of the conservation and management of the migratory species concerned which serve to achieve that object.

2. Each Agreement should cover the whole of the range of the migratory species concerned and should be open to accession by all Range States of that species, whether or not they are Parties to this Convention.

3. An Agreement should, wherever possible, deal with more than one migratory species.

Remarks

Annex I of the Bonn Convention contains white-tailed eagle *Haliaeetus albicilla,* greater spotted eagle *Aquila clanga,* Spanish imperial eagle *A. adalberti,* imperial eagle *A. heliaca,* and lesser kestrel *Falco naumanni*, while all the Falconiforms (including those listed in Annex I) are listed in Appendix II. However, none of the owls are covered by this Convention.

The Status of Migratory Raptors in Central, South and East Asia

The data presented below are taken from received responses to a raptor status questionnaire that was distributed in Asia in November 2006 via the BirdLife International network. Note that data were not collected on the following eleven species, which are primarily African-Palearctic migrants: Levant sparrowhawk, lesser spotted eagle, Amur falcon, sooty falcon, lesser kestrel, red-footed falcon, griffon vulture, black kite, European honey buzzard, pallid scops owl and common scops owl.

Key

Country/territory estimates

The most likely population trend over the last 10 years is indicated as follows: **D30** = a decline by more than 30%; **D10** = a decline by more than 10% but less than 30%; **ND** = no decline (or evidence suggesting a decline); **?** = unknown.

Combined regional assessment

The most frequent trend is indicated. Entries in parentheses indicate that the trend is uncertain. This takes into account the data provided by each country, using the following decision rules. Assessed as Declining (**D**) if:

- The majority of trends are declining (D10 or D30);
- If no trend in a majority then D30 counts as D twice;
- If there is still no trend in a majority then the trend is considered to be declining if more than 2 trends are declining (D10 or D30) and no more than one trend is unknown (?), otherwise the trend is considered to be uncertain (?);
- If half or more trends are unknown then the trend is uncertain and placed in brackets; and
- If less then 3 are trends are given then the trend is uncertain and placed in brackets.

Species with an unfavourable conservation status (because they are Globally Threatened or Near Threatened, or declining in the region) are highlighted in bold type.

Scientific name	English Name	Nepal	Thailand	Vietnam	Indonesia	Hong Kong	Malaysia	China-west	China (Yunnan)	Japan	Combined
Falco tinnunculus	Common Kestrel	ND	D10	ND	?	ND	?	ND	D10	ND	ND
Falco columbarius	Merlin	?	0	0	0	0	0	D10	?	0	?
Falco subbuteo	Eurasian Hobby	D10	ND	D10	?	ND	?	ND	?	?	?
Falco severus	Oriental Hobby	D30	ND	?	?	0	?	0	?	0	?
Falco cherrug	**Saker Falcon**	**ND**	**0**	**0**	**0**	**0**	**0**	**D30**	**0**	**0**	**(D)**
Falco rusticolus	Gyr Falcon	0	0	0	0	0	0	?	0	0	?
Falco peregrinus	Peregrine Falcon	D10	ND	D10	ND	ND	?	D10	?	ND	ND
Falco pelegrinoides	Barbary Falcon	0	0	0	0	0	0	D10	0	0	?
Pandion haliaetus	Osprey	ND	ND	ND	?	ND	?	?	?	0	(ND)
Aviceda jerdoni	Jerdon's Baza	D10	ND	D10	?	0	?	0	?	0	?
Aviceda leuphotes	Black Baza	ND	ND	D10	?	ND	D10	0	?	0	ND
Pernis ptilorhyncus	**Oriental Honey-buzzard**	**D10**	**ND**	**D10**	**ND**	**ND**	**D10**	**?**	**?**	**D**	**(D)**
Milvus lineatus	**Black-eared Kite**	**D10**	**D30**	**0**	**?**	**ND**	**0**	**ND**	**D10**	**0**	**D**
Haliaeetus leucoryphus	**Pallas's Fish-eagle**	**D30**	**0**	**?**	**0**	**0**	**0**	**D30**	**0**	**0**	**(D)**
Haliaeetus albicilla	White-tailed Eagle	D10	0	0	0	0	0	?	ND	ND	ND
Haliaeetus pelagicus	**Steller's Sea-eagle**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**?**
Neophron percnopterus	Egyptian Vulture	ND	0	0	0	0	0	?	0	0	(ND)
Aegypius monachus	Cinereous Vulture	D10	0	D30	0	D10	?	?	D10	0	D
Circaetus gallicus	Short-toed Snake-eagle	D10	0	?	?	0	?	?	?	0	?
Circus aeruginosus	**Western Marsh-harrier**	**D10**	**0**	**D10**	**?**	**0**	**0**	**D10**	**?**	**D**	**(D)**
Circus spilonotus	**Eastern Marsh-harrier**	**0**	**D10**	**ND**	**?**	**D10**	**?**	**0**	**0**	**0**	**D**

Scientific name	English Name	Nepal	Thailand	Vietnam	Indonesia	Hong Kong	Malaysia	China-west	China (Yunnan)	Japan	Combined
Circus assimilis	Spotted Harrier	0	0	0	0	0	0	0	0	0	?
Circus cyaneus	Northern Harrier	D10	0	0	?	0	?	D10	?	0	?
Circus macrourus	**Pallid Harrier**	**D10**	**0**	**?**	**0**	**0**	**0**	**?**	**0**	**0**	**?**
Circus melanoleucos	Pied Harrier	D10	D10	ND	?	ND	?	0	?	0	?
Circus pygargus	**Montagu's Harrier**	**D10**	**0**	**0**	**0**	**0**	**0**	**D30**	**0**	**0**	**(D)**
Accipiter badius	Shikra	ND	ND	ND	?	0	?	?	?	0	?
Accipiter soloensis	Chinese Goshawk	0	ND	ND	ND	ND	D10	0	?	0	ND
Accipiter gularis	Japanese Sparrowhawk	0	ND	ND	ND	ND	D10	?	0	ND	ND
Accipiter nisus	Eurasian Sparrowhawk	ND	ND	?	?	ND	0	ND	?	0	ND
Accipiter gentilis	**Northern Goshawk**	**ND**	**D30**	**?**	**0**	**0**	**0**	**D10**	**?**	**ND**	**D**
Butastur indicus	Grey-faced Buzzard	0	ND	ND	?	ND	D10	0	?	D10	ND
Buteo buteo	Common Buzzard	D10	ND	ND	?	ND	?	?	D10	ND	ND
Buteo rufinus	Long-legged Buzzard	D10	0	0	0	0	0	ND	?	0	(ND)
Buteo hemilasius	**Upland Buzzard**	**D30**	**0**	**0**	**0**	**0**	**0**	**D10**	**?**	**0**	**(D)**
Buteo lagopus	Rough-legged Hawk	0	0	0	0	0	0	?	?	0	?
Aquila clanga	**Greater Spotted Eagle**	**D10**	**D30**	**D30**	**?**	**D10**	**?**	**?**	**?**	**0**	**(D)**
Aquila nipalensis	**Steppe Eagle**	**D10**	**D30**	**D30**	**?**	**0**	**?**	**ND**	**?**	**0**	**D**
Aquila heliaca	**Eastern Imperial Eagle**	**D10**	**D30**	**D30**	**0**	**D10**	**?**	**D30**	**D30**	**0**	**D**
Aquila chrysaetos	**Golden Eagle**	**D10**	**0**	**0**	**0**	**0**	**0**	**D10**	**D10**	**D**	**D**
Hieraaetus pennatus	**Booted Eagle**	**D10**	**ND**	**0**	**?**	**0**	**0**	**D10**	**?**	**0**	**D**

Scientific name	English Name	Nepal	Thailand	Vietnam	Indonesia	Hong Kong	Malaysia	China-west	China (Yunnan)	Japan	Combined
Spizaetus nipalensis	Mountain Hawk-eagle	ND	ND	D10	0	?	?	0	?	D	?
Otus sunia	Oriental Scops-owl	ND	ND	?	0	?	?	0	0	0	?
Nyctea scandiaca	Snowy Owl	0	0	0	0	0	0	?	0	0	?
Strix uralensis	Ural Owl	0	0	0	0	0	0	?	0	0	?
Strix nebulosa	Great Grey Owl	0	0	0	0	0	0	?	0	0	?
Surnia ulula	Northern Hawk Owl	0	0	0	0	0	0	ND	0	0	?
Aegolius funereus	Boreal Owl	0	0	0	0	0	0	ND	0	0	?
Ninox scutulata	Brown Hawk-owl	D10	ND	?	0	ND	?	0	?	D30	?
Asio otus	Long-eared Owl	D10	0	0	0	0	0	ND	0	?	(ND)
Asio flammeus	Short-eared Owl	D10	ND	?	0	ND	?	D10	?	0	?

Sources:

China – west (Xinjiang): Professor Ma Ming (China Ornithological Society and Xinjiang Institute of Ecology and Geography). China – Yunnan: Han Lianxian, Han Ben, Liu Yueqiang, Wang Zijiang and Duan Ziming (Faculty of Conservation Biology, Southwest Forestry University, Kunming Ornithology Association). China – Hong Kong: Yat-tung Yu (Hong Kong Bird Watching Society).

Indonesia: Wishnu Sukmantoro (Raptor Indonesia and PILI-NGO Movement).

Japan: Mutsuyuki Ueta (Japan Bird Research Association).

Malaysia: Yeap Chin Aik (Malaysian Nature Society).

Nepal: Hem Sagar Baral (Bird Conservation Nepal).

Thailand: Assessment based on a combination of three returned questionnaires, received from Philip Round (Mahidol University, and Bird Conservation Society of Thailand), Chaiyan Kasorndoarkbu (Thai Raptor Group & Kasetsart University) and Mr. Chukiat Nualsri (Nathung Sub-District Administrative Organization, Thailand).

Vietnam: Le Manh Hung (Institute of Ecology and Biological Resources/ Vietnam Birdwatching Club), with comments from John Pilgrim and Le Trong Trai (BirdLife International – Indochina).

Draft Memorandum of Understanding on the Conservation of Migratory Raptors in Africa and Eurasia

[Regional Agreement on the Protection of Raptors – RAPTOR]

The signatories

RECALLING that the Convention on the Conservation of Migratory Species of Wild Animals, signed at Bonn on 23 June 1979, calls for international co-operative action to conserve migratory species and that Article IV.4 of that convention encourages Signatories to conclude Agreements – including non-binding administrative agreements such as this one – in respect of any populations of migratory species;

NOTING that several species of Falconiformes are listed in Appendix I and all the rest of the Falconiformes in Appendix II of that Convention;

CONSIDERING that as predators, raptors serve as high-level indicators of ecosystem health across their range;

RECOGNIZING that many populations of raptors migrate between and within Africa and Eurasia, crossing the territory of different countries;

CONCERNED by the considerable number of African-Eurasian migratory species of raptors that presently have an unfavourable conservation status at a regional and/or global level and the lack of knowledge of the status of migratory raptors in Africa, Asia and the Middle East;

AWARE that among the factors which contribute to the continuous decline of African-Eurasian raptors are the loss, degradation or fragmentation of suitable habitats, direct human persecution by shooting and taking for falconry, collateral mortality or reduced breeding success caused by human economic activities (including pollution, collisions with powerlines and wind turbines, and disturbance), and that climate change will very likely add further stress on raptor populations;

MINDFUL that a range of exiting multi-lateral environmental agreements can or do contribute to the conservation of migratory raptors but lack a unifying international plan of action;

CONVINCED of the need for immediate and concerted international actions to conserve African-Eurasian migratory species of raptors and restore them in general to favourable conservation status;

DESIROUS to implement Resolution No. 3 adopted by the VI World Conference on Birds of Prey and Owls held in Budapest, Hungary, 18-23 May 2003, and UNEP/CMS Recommendation 8.12 on Improving the Conservation Status of Raptors and Owls in Africa and Eurasia;

REALISING the importance of involving all range states in the region as well as relevant inter-governmental, non-governmental and private sector organisations in cooperative conservation for migratory raptors and their habitats;

ACKNOWLEDGING that effective implementation and enforcement of such actions will require assistance to be provided, in a spirit of solidarity, to some Range States for research and training, to monitor migratory raptors and their habitats, to manage them and their habitats and to establish or improve scientific and administrative institutions;

HAVE AGREED as follows:

Scope and Definitions

1. For the purpose of this Memorandum of Understanding

a) "Raptor" means migratory populations of Accipitriformes, Falconiformes and Strigiformes occurring in Africa and Eurasia, listed in Appendix 1;

b) "Africa and Eurasia" means the whole or parts of the territories of the range states contained within the boundary marked on the map provided in Appendix 2;

c) "Conservation" means the protection and management, including sustainable utilisation, of raptors and their habitats, in accordance with the objectives and principles of this Memorandum of Understanding;

d) "Convention" means the Convention on the Conservation of Migratory Species of Wild Animals, signed at Bonn on 23 June 1979;

e) "Signatory" means a Signatory to this Memorandum of Understanding;

f) "Secretariat" means the Secretariat of the Convention.

g) "Action Plan" means the Action Plan for the Conservation of African-Eurasian Migratory Raptors.

In addition, the terms defined in Article I, subparagraphs 1 (a) to (i), of the Convention shall have the same meaning, *mutatis mutandis,* in this Agreement.

2. This Memorandum of Understanding is an agreement under Article IV, paragraph 4, as defined by Resolution 2.6 adopted at the Second Conference of the Signatories (Geneva, 11-14 October 1988).

3. The interpretation of any term or provision of this Memorandum of Understanding shall be made in accordance with the Convention and/or relevant Resolutions adopted by its Conference of the Signatories, unless such a term or provision is defined or interpreted differently in this Memorandum of Understanding.

4. The Action Plan (Appendix 3) annexed to this Memorandum of Understanding is an integral part thereof.

Fundamental Principles

5. Signatories aim to take co-ordinated measures to prevent the extinction of raptors and to achieve and maintain their favourable conservation status throughout their range. To this end, they will pursue, within the limits of their jurisdiction and in accordance with their international obligations, the measures prescribed in Paragraphs 7 and 8, together with the specific actions laid down in the Action Plan.

6. In implementing the measures prescribed in Paragraph 5 above, Signatories will seek to apply the precautionary principle.

General Conservation Measures

7. Signatories strive to adopt, implement and enforce such legal, regulatory and administrative measures as may be necessary to conserve raptors and their habitat.

8. To this end, Signatories endeavour to:

a) identify important habitats for raptors occurring within their territory and encourage their protection, conservation, rehabilitation and restoration;

b) coordinate their efforts to ensure that a network of suitable habitats is maintained or, where appropriate, established in Africa and Eurasia, in particular where such habitats extend over the territory of more than one Signatory to this Memorandum of Understanding;

c) investigate problems that are posed or are likely to be posed by human activities and endeavour to implement remedial measures, including habitat rehabilitation and restoration, and compensatory measures for loss of habitat;

d) cooperate in emergency situations requiring concerted international action, in developing appropriate emergency procedures to provide increased protection to vulnerable raptor populations and in preparing guidelines to assist individual Signatories in addressing such situations;

e) ensure that any utilisation of raptors (in particular taking for falconry and post-hunting release) is based on an assessment of the best available knowledge of their ecology and is sustainable for the species as well as for the ecological systems that support them;

f) prohibit the deliberate introduction of non-native species into Africa and Eurasia and take all appropriate measures to prevent the unintentional release of such species if this introduction or release would prejudice the conservation status of raptors. When non-native species have already been introduced, the Signatories will take all appropriate measures to prevent these species from becoming a potential threat to raptors;

g) initiate or support research into the biology and ecology of raptors, including the harmonization of research and monitoring methods and, where appropriate, the establishment of joint or cooperative research and monitoring programmes;

h) analyse their training requirements for, *inter alia*, surveys, monitoring, marking and habitat management to identify priority topics and areas for training and to cooperate in the development and provision of appropriate training programmes;

i) develop and maintain programmes to raise awareness and understanding of conservation issues relating to raptors and their habitat as well as the objectives and provisions of this Memorandum of Understanding;

j) exchange information and the results from research, monitoring, conservation and education programmes; and

k) cooperate with a view to assisting each other to implement this Memorandum of Understanding, particularly in the areas of research and monitoring.

9. With a view to promoting the conservation status of raptors, Signatories may encourage other Range States to sign this Memorandum of Understanding.

Implementation and Reporting

10. Each Signatory will:

a) designate an authority or an authorized scientist as a national contact point for all matters relating to the implementation of this Memorandum of Understanding; and

b) communicate the name and address of that authority or scientist to the Secretariat.

11. Within two years of this Memorandum of Understanding coming in to force, Signatories will prepare and submit to the Secretariat a national plan of action for conservation of raptors aimed at implementing this Memorandum of Understanding and accompanying Action Plan. The format, contents and period of the national plan of action will be developed by the Secretariat taking account of the Action Plan and the CMS Strategic Plan. The Secretariat will communicate to all Signatories and all other Range States all national plans of action received from the Signatories.

12. The Meeting of the Signatories is the decision-making body of this Memorandum of Understanding. The Secretariat will convene a meeting of the Signatories upon request of at least half of the States which are Signatories to this Memorandum of Understanding, subject to the availability of funds. The meeting will elect a Chairman and consider for adoption the rules of procedure recommended by the Secretariat. Meetings will be arranged wherever possible to coincide with other appropriate gatherings where the relevant experts would be present. Any agency or body technically qualified in such matters may be represented at sessions of the Meeting of the Signatories by observers, unless at least one third of the Signatories present object. Participation will be subject to the rules of procedure.

13. The first Meeting of Signatories will be convened as soon as possible after at least three quarters of the Signatories have submitted their national plans of action. At the first meeting, the Secretariat will present an overview report compiled on the basis of all information at its disposal pertaining to raptors, and present proposals for an international plan of action (aiming to complement and reinforce the national plans of action) that can be considered for adoption by the Signatories. The first meeting will also adopt a format for and schedule of regular progress reports on implementing the national and international plans of action, a procedure for amending Table 1 of the Action Plan, and make such arrangements as may be necessary for convening subsequent meetings of Signatories.

14. The Secretariat will compile the regular national and international progress reports and circulate them to all Signatories and Range States.

15. Signatories to this Memorandum of Understanding which are also Signatories to the Convention will in their national report to the Conference of the Parties make specific reference to activities undertaken in relation to this Memorandum of Understanding.

16. The Signatories endeavour to exchange expeditiously the scientific, technical and legal information needed to co-ordinate conservation measures and cooperate with other Range States, appropriate international organizations and recognized scientists with a view to developing co-operative research and facilitating the implementation of this Memorandum of Understanding and its Action Plan.

17. Signatories endeavour to finance from national sources the implementation on their territory of the measures necessary for the conservation of raptors. In addition, they endeavour to assist

each other in the implementation and financing of key points of the Action Plan, and seek assistance from other sources for the financing and implementation of their national work programmes.

Final Provisions

18. This Memorandum of Understanding is concluded for an indefinite period.

19. This Memorandum of Understanding, including the Action Plan which is appended to it, may be amended at any meeting of the Signatories. Any amendment will be adopted by consensus at a meeting of the Signatories and will become effective on the date of its adoption by the meeting. The Secretariat will communicate the text of any amendment so adopted to all Signatories and to all other Range States.

20. The geographical range of the Memorandum of Understanding may be extended.

21. Nothing in this Memorandum of Understanding shall prevent any of the Signatories adopting stricter measures for the conservation of raptors on its territory.

22. Nothing in this Memorandum of Understanding shall bind any of the Signatories either jointly or severally.

23. This Memorandum of Understanding shall be open for signature indefinitely, at the seat of the Secretariat, for all Range States of African-Eurasian raptors and for the United Nations, its Specialized Agencies, any regional economic integration organization, any secretariat of relevant international agreements, and any competent international organizations which are especially involved in the conservation and management of raptors.

24. This Memorandum of Understanding shall become effective on the first day of the month following the date of signature of the eighth Range State, provided that at least one of the Signatories is a member of the European Union, at least one Signatory is a non-EU member situated in Eurasia, at least one signatory is situated in the Middle East, at least one Signatory is situated in Southern Asia, and at least one Signatory is a member of the African Union. Thereafter, it will become effective for any other Signatory on the first day of the month following the date of signature by that Signatory.

25. Any Signatory may withdraw from this Memorandum of Understanding by written notification to the Secretariat. The withdrawal will take effect for that Signatory six months after the date on which the Secretariat has received the notification.

26. The Secretariat will be the Depositary of this Memorandum of Understanding.

27. The working language for all matters relating to this Memorandum of Understanding, including meetings, documents and correspondence, is English.

Done at xxxxxxx, on xxxxxxx:

Signatory and Authority Represented:

Appendix 1

List of African-Eurasian Migratory Raptors*

Falco naumanni	Lesser Kestrel
Falco tinnunculus	Common Kestrel
Falco alopex	Fox Kestrel
Falco vespertinus	Red-footed Falcon
Falco amurensis	Amur Falcon
Falco eleonorae	Eleonora's Falcon
Falco concolor	Sooty Falcon
Falco columbarius	Merlin
Falco subbuteo	Eurasian Hobby
Falco severus	Oriental Hobby
Falco biarmicus	Lanner Falcon
Falco cherrug	Saker Falcon
Falco rusticolus	Gyr Falcon
Falco peregrinus	Peregrine Falcon
Falco pelegrinoides	Barbary Falcon
Pandion haliaetus	Osprey
Aviceda cuculoides	African Baza
Aviceda jerdoni	Jerdon's Baza
Aviceda leuphotes	Black Baza
Pernis apivorus	European Honey-buzzard
Pernis ptilorhyncus	Oriental Honey-buzzard
Chelictinia riocourii	African Swallow-tailed Kite
Milvus milvus	Red Kite
Milvus migrans	Black Kite
Milvus lineatus	Black-eared Kite
Haliaeetus leucoryphus	Pallas's Fish-eagle
Haliaeetus albicilla	White-tailed Eagle
Haliaeetus pelagicus	Steller's Sea-eagle
Neophron percnopterus	Egyptian Vulture
Gyps fulvus	Griffon Vulture

Aegypius monachus	Cinereous Vulture
Circaetus gallicus	Short-toed Snake-eagle
Circus aeruginosus	Western Marsh-harrier
Circus spilonotus	Eastern Marsh-harrier
Circus maurus	Black Harrier
Circus cyaneus	Northern Harrier
Circus macrourus	Pallid Harrier
Circus melanoleucos	Pied Harrier
Circus pygargus	Montagu's Harrier
Accipiter badius	Shikra
Accipiter brevipes	Levant Sparrowhawk
Accipiter soloensis	Chinese Goshawk
Accipiter gularis	Japanese Sparrowhawk
Accipiter virgatus	Besra
Accipiter ovampensis	Ovampo Sparrowhawk
Accipiter nisus	Eurasian Sparrowhawk
Accipiter gentilis	Northern Goshawk
Butastur rufipennis	Grasshopper Buzzard
Butastur indicus	Grey-faced Buzzard
Buteo buteo	Common Buzzard
Buteo oreophilus	Mountain Buzzard
Buteo rufinus	Long-legged Buzzard
Buteo hemilasius	Upland Buzzard
Buteo lagopus	Rough-legged Hawk
Buteo auguralis	Red-necked Buzzard
Aquila pomarina	Lesser Spotted Eagle
Aquila clanga	Greater Spotted Eagle
Aquila rapax	Tawny Eagle
Aquila nipalensis	Steppe Eagle
Aquila adalberti	Spanish Imperial Eagle
Aquila heliaca	Eastern Imperial Eagle
Aquila chrysaetos	Golden Eagle
Aquila wahlbergi	Wahlberg's Eagle

Hieraaetus pennatus	Booted Eagle
Spizaetus nipalensis	Mountain Hawk-eagle
Otus brucei	Pallid Scops-owl
Otus scops	Common Scops-owl
Otus sunia	Oriental Scops-owl
Nyctea scandiaca	Snowy Owl
Strix uralensis	Ural Owl
Strix nebulosa	Great Grey Owl
Surnia ulula	Northern Hawk Owl
Aegolius funereus	Boreal Owl
Ninox scutulata	Brown Hawk-owl
Asio otus	Long-eared Owl
Asio flammeus	Short-eared Owl

* This excludes the following four migratory species, because they are considered to be primarily Australasian species: Nankeen kestrel (*Falco cenchroides*), Australian hobby *(Falco longipennis)*, swamp harrier *(Circus approximans)* and brown goshawk *(Accipiter fasciatus)*. It also excludes spotted harrier *(Circus assimilis)* because this does not occur within the area covered by the MoU.

Appendix 2

Map of Range States of Africa and Eurasia covered by the Memorandum of Understanding

Range States

Afrotropical realm*

Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Central African Republic
Chad
Congo
Congo, Dem. Rep.
Côte d'Ivoire
Djibouti
Equatorial Guinea
Eritrea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mozambique
Namibia
Niger
Nigeria
Rwanda
Senegal
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania
Togo
Uganda
Zambia
Zimbabwe

*Excludes Cape Verde, Comoros, Mauritius, Mayotte (to France), Réunion (to France), Sâo Tomé e Principe and Seychelles

Palearctic realm

Afghanistan
Åland Islands (to Finland)
Albania
Algeria
Andorra
Armenia
Austria
Azerbaijan
Bahrain
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
China (mainland)
Croatia
Cyprus
Czech Republic
Denmark
Egypt
Estonia
Faroe Islands (to Denmark)
Finland
France
Georgia
Germany
Gibraltar (to UK)
Greece
Greenland
Hungary
Iceland
Iran
Iraq
Ireland
Israel
Italy
Jordan
Kazakhstan
Kuwait
Kyrgyzstan
Latvia
Lebanon
Libya
Liechtenstein
Lithuania
Luxembourg
Macedonia, FYR
Malta
Mauritania
Moldova
Monaco
Mongolia
Morocco
Netherlands
Norway
Oman
Palestinian Authority Territories
Poland
Portugal
Qatar
Romania
Russia
San Marino
Saudi Arabia
Serbia and Montenegro
Slovakia
Slovenia
Spain (including the Canary Islands)
Svalbard and Jan Mayen Islands (to Norway)
Sweden
Switzerland
Syria
Tajikistan
Tunisia
Turkey
Turkmenistan
Ukraine
United Arab Emirates
United Kingdom
Uzbekistan
Vatican City
Western Sahara
Yemen

Indo-Malayan realm

Bangladesh
Bhutan
India
Nepal
Pakistan
Sri Lanka

Appendix 3

Draft Action Plan for the Conservation of Migratory Raptors in Africa and Eurasia

1 General Aim

1.1 The general aim is to ensure that all populations of raptors (including owls) listed in Appendix 1 of the Memorandum of Understanding are maintained in, or returned to, Favourable Conservation Status within the meaning of Article 1(c) of the Convention.

2 Objectives

2.1 For the effective period of this Action Plan, the following objectives are set:

a) To reverse the population declines of Globally Threatened and Near Threatened migratory raptors and alleviate threats to them such that they are no longer Globally Threatened;

b) To halt the population declines of other migratory raptors with an Unfavourable Conservation Status within the Africa and Eurasia and alleviate threats to them in order to return their populations to Favourable Conservation Status.

c) To anticipate, reduce and avoid new threats to all migratory raptors species, especially to prevent any species with a Favourable Conservation Status from declining.

3 Species Categories

3.1 The raptor species included in Appendix 1 (and any subsequent amendments of it) are assigned within the following categories:

Category 1: Globally Threatened and Near Threatened species as defined according to IUCN criteria and listed as such in the BirdLife International World Bird Database;

Category 2: Species considered to have Unfavourable Conservation Status at a regional level within the area of the Memorandum of Understanding (defined in Appendix 2);

Category 3: all other species.

3.2 The species in Appendix 1 are assigned to the categories provided for in paragraph 3.1 as given in Table 1, for the effective period of this Action Plan, unless amended in accordance with a procedure to be agreed by the Signatories at the First Meeting of Signatories.

4 Priority Actions

4.1 Taking into account the predicted impacts of threats and opportunities for reducing them, the priority actions for achieving the objectives given in paragraph 2 are considered to be (in order of importance):

- Protecting all species from shooting, persecution and unsustainable exploitation.

- Protecting and appropriately managing important sites: especially where Category 1 species breed, and all migration bottlenecks (known important congregatory sites are listed in Table 3).

- Alleviating habitat degradation through the development and promotion of sustainable land management policies and practices.

- Raising awareness about migratory raptors, their current plight and the threats that they face, and the measures that need to be taken to conserve them.

- Monitoring populations throughout the region to establish reliable population trends; carry out research to establish the impacts of threats on them and the measures that are needed to alleviate them; and sharing information between Signatories and other Range States.

5 Implementation Framework

1.1 Activities The principal activities signatories ought to undertake in order to implement the general provisions of the Memorandum of Understanding and the specific issues addressed in this Action Plan are set out in Table 2. These activities will be addressed by the national plans of action, and international plan of action for transboundary activities, as required by paragraph 11 of the Memorandum of Understanding.

1.2 Priorities The activities in Table 2 are accorded the following orders of priority:

First: an activity needed to prevent global extinction of a species.

Second: an activity needed to prevent or reverse declines in any Globally Threatened or Near Threatened species, or the majority of other species with an Unfavourable Conservation Status.

Third: an activity needed to restore populations of a Globally Threatened or Near Threatened species, or to prevent declines in any species with an Unfavourable Conservation Status.

Fourth: an activity needed to restore populations in any species with an Unfavourable Conservation Status, or to prevent declines in any species with a Favourable Conservation Status.

These priorities ought to be taken into account in the preparation of national plans of action for raptors as required under paragraph 11 of the Memorandum of Understanding.

5.3 **Time schedule** The activities in Table 2 are accorded the following time schedules:

Immediate: an activity to be completed within two years from the date of effectiveness;

Short term: an activity to be completed within three years from the date of effectiveness;

Medium: an activity to be completed within five years from the date of effectiveness;

Long term: an activity to be completed within seven years from the date of effectiveness;

Ongoing: an activity to be undertaken throughout the period of effectiveness;

5.4 **Responsibilities** The organisation types expected to lead on the various activities are indicated in Table 2. Existing signatories are urged to encourage the full range of necessary organisations to participate in the implementation of this Action Plan whether or not they are currently signatories to the Memorandum of Understanding.

5.5 **Targets** The Secretariat will monitor the progress and efficacy of this Action Plan according to the performance targets for certain activities given in Table 2.

6 Synergy with other MEAs

6.1 Insofar as a range state is represented as a Signatory to this Memorandum of Understanding is also Contracting Party to one or more Multilateral Environmental Agreements that has or have provisions that achieve or otherwise assist the aims, objectives and activities of this Action Plan, and having legal authority or precedence over the Memorandum of Understanding, such MEAs will be applied as appropriate and to their full extent in the first instance.

6.2 In pursuit of paragraph 6.1, signatories to the Memorandum of Understanding will undertake an audit of the relevant MEAs and their potential application for the implementation of this Action Plan and include the results in their national plans of action under paragraph 11 of the Memorandum of Understanding.

7 Progress Reports

7.1 Signatories and the Secretariat will report on progress with implementing the Action Plan in accordance with paragraphs 13 and 14 of the Memorandum of Understanding.

8 Period of Effectiveness

8.1 This Action Plan comes into effect on the same date as the entry in to force of the Memorandum of Understanding and shall have a period of seven years. At least two years before the expiry of this period, a full review of the Action Plan will be undertaken and a revised version prepared for the approval of the signatories.

Table 1: Categorisation of African-Eurasian raptors covered by the Action Plan(1)

Category 1[(2)]

Falco naumanni	Lesser Kestrel	VU
Falco vespertinus	Red-footed Falcon	NT
Falco cherrug	Saker Falcon	EN
Milvus milvus	Red Kite	NT
Haliaeetus leucoryphus	Pallas's Fish-eagle	VU
Haliaeetus pelagicus	Steller's Sea-eagle	VU
Aegypius monachus	Cinereous Vulture	NT
Circus maurus	Black Harrier	VU
Circus macrourus	Pallid Harrier	NT
Aquila clanga	Greater Spotted Eagle	VU
Aquila adalberti	Spanish Imperial Eagle	VU
Aquila heliaca	Eastern Imperial Eagle	VU

Category 2[3]

Falco tinnunculus	Common Kestrel
Falco eleonorae	Eleonora's Falcon
Falco biarmicus	Lanner Falcon
Falco rusticolus	Gyrfalcon
Pandion haliaetus	Osprey
Pernis ptilorhyncus	Oriental Honey-buzzard
Chelictinia riocourii	African Swallow-tailed Kite
Milvus migrans	Black Kite
Milvus lineatus	Black-eared Kite
Haliaeetus albicilla	White-tailed Eagle
Neophron percnopterus	Egyptian Vulture
Circaetus gallicus	Short-toed Snake-eagle
Circus spilonotus	Eastern Marsh-harrier
Circus cyaneus	Northern Harrier
Accipiter brevipes	Levant Sparrowhawk
Butastur indicus	Grey-faced Buzzard
Buteo rufinus	Long-legged Buzzard
Buteo hemilasius	Upland Buzzard
Aquila pomarina	Lesser Spotted Eagle
Aquila rapax	Tawny Eagle
Aquila nipalensis	Steppe Eagle
Aquila chrysaetos	Golden Eagle
Hieraaetus pennatus	Booted Eagle
Otus brucei	Pallid Scops-owl
Otus scops	Common Scops-owl
Nyctea scandiaca	Snowy Owl
Asio flammeus	Short-eared Owl

Category 3[4]

Falco alopex	Fox Kestrel
Falco amurensis	Amur Falcon
Falco concolor	Sooty Falcon
Falco columbarius	Merlin
Falco subbuteo	Eurasian Hobby
Falco severus	Oriental Hobby
Falco peregrinus	Peregrine Falcon
Falco pelegrinoides	Barbary Falcon
Aviceda cuculoides	African Baza
Aviceda jerdoni	Jerdon's Baza
Aviceda leuphotes	Black Baza
Pernis apivorus	European Honey-buzzard
Gyps fulvus	Griffon Vulture
Circus aeruginosus	Western Marsh-harrier
Circus melanoleucos	Pied Harrier
Circus pygargus	Montagu's Harrier
Accipiter badius	Shikra
Accipiter soloensis	Chinese Goshawk
Accipiter gularis	Japanese Sparrowhawk
Accipiter virgatus	Besra
Accipiter ovampensis	Ovampo Sparrowhawk
Accipiter nisus	Eurasian Sparrowhawk
Accipiter gentilis	Northern Goshawk
Butastur rufipennis	Grasshopper Buzzard
Buteo buteo	Common Buzzard
Buteo oreophilus	Mountain Buzzard
Buteo lagopus	Rough-legged Hawk
Buteo auguralis	Red-necked Buzzard

Aquila wahlbergi	Wahlberg's Eagle
Spizaetus nipalensis	Mountain Hawk-eagle
Otus sunia	Oriental Scops-owl
Strix uralensis	Ural Owl
Strix nebulosa	Great Grey Owl
Surnia ulula	Northern Hawk Owl
Aegolius funereus	Boreal Owl
Ninox scutulata	Brown Hawk-owl
Asio otus	Long-eared Owl

Notes

1: Listed in Appendix 1

2: Globally Threatened and Near Threatened species as defined by IUCN and listed on BirdLife International's World Bird Database (EN = Endangered; VU = Vulnerable; NT = Near threatened)

3: Species that are considered to have Unfavourable Conservation Status at a regional level within the area (defined in Appendix 2) of the Memorandum of Understanding

4: All other species.

Table 2: Activities to be done under paragraph 5 of the Action Plan

Activities	Species	Countries	Priority Level	Time-scale	Organisations	Target
Activity 1: Improvement of legal protection						
1.1. Update CMS appendices to include all Category 1 species on Annex I	Cat. 1	–	Second	Short	CMS Secretariat/ CoP	CMS appendices amended
1.2. Ensure national legislation protects all raptors from all forms of killing, disturbance at nest sites, egg-collection and taking from the wild unless this can be shown to be sustainable and forms part of an International Management Plan agreed by parties to this MoU	All	All	First	Immediate	Governments	All raptors given full protection in the national legislation of all Signatories and unsustainable taking of birds is prohibited
1.3 Ensure that national legislation bans the use of exposed poison baits for predator control	All	All	First	Immediate	Governments	The national legislation of all Signatories bans use of exposed poison baits
1.4 Ensure that national legislation requires all new power lines to be designed to avoid raptor electrocution	All	All	Second	Short	Governments	The national legislation of all Signatories requires power line design to avoid electrocution
1.5 Strengthen the application of legal protection for raptors by ensuring appropriate penalties, training law enforcement authorities, and raising public awareness to boost surveillance and reporting of illegal activities, particularly at bottleneck sites	All	All	Second	Ongoing	Governments, law enforcement agencies and NGOs	Individuals breaking protection laws are prosecuted; results of prosecutions relayed to Secretariat and included in national reports

Activities	Species	Countries	Priority Level	Time-scale	Organisations	Target
1.6 Identify gaps in existing MEAs where raptor protection and conservation can be improved and draw these to the attention of the relevant Secretariat and other Parties	All	All	Third	Intermediate	CMS Secretariat/ Governments/ NGOs	Provisions of existing MEAs strengthened with respect to raptor protection and conservation
Activity 2: Protect and manage important sites and flyways						
2.1 Designate nationally and internationally important sites (including those listed in Table 3) as protected areas with management plans that are agreed with key stakeholders and take raptor conservation requirements into account	All	All countries listed in Table 3	Second	Medium	Governments, BirdLife International and site stakeholders	All important sites have conservation measures in place
2.2 Include important national and international sites (including those listed in Table 3) in the EU within the Natura 2000 network	All	EU member states	Second	Short	Governments and European Commission	All important sites designated as SPAs under the EU Wild Birds Directive
2.3 Require EIAs in accordance with the CBD guidelines (CBD Decision VI/7A and any subsequent amendments) and CMS Resolution 7.2 on Impact Assessment and Migratory Species for any projects potentially impacting sites listed in Table 3 and any other sites holding significant populations of Category 1 and 2 species.	Cat 1 and 2	All	Third	Medium	Governments, forestry, energy and infrastructure sectors	National EIA regulations require EIAs for projects impacting raptor sites; results of EIAs relayed to the Secretariat and included in national reports

Activities	Species	Countries	Priority Level	Time-scale	Organisations	Target
2.4 Conduct risk assessments at important sites (including those listed in Table 3) to identify and address actual or potential causes of incidental mortality from human causes (including fire, laying poisons, pest spraying, power lines, wind turbines)	Cat. 1 and 2	All	Third	Ongoing	Governments and land managers	Incidental mortality of raptors reduced to insignificant levels
2.5 Conduct Strategic Environmental Assessments of planned infrastructure developments within major flyways to identify key risk areas	All	All countries with bottleneck sites	Third	Medium	Governments	SEAs carried out and results relayed to the Secretariat and included in national reports
Activity 3: Habitat conservation and sustainable management						
3.1 Develop schemes under the EU EAFRD/ Rural Development Regulation that are targeted towards maintaining or restoring habitats for raptors	Cat. 1 and 2	EU Member States	Second	Ongoing	Governments, forest authorities, private land managers	Agri-environment schemes that benefit raptors are available for land managers
3.2 Survey, maintain and restore natural vegetation cover in former habitats (especially grasslands) in the range of globally threatened species	Cat. 1	All range states of Cat. 1 species	Third	Long	Government, land managers	Inventories of grassland areas supporting Cat. 1 species prepared and at least 30% of former grassland habitats having natural vegetation cover and under sustainable management

Activities	Species	Countries	Priority Level	Time-scale	Organisations	Target
Activity 4: Raise awareness of problems faced by migratory raptors and measures needed to conserve them						
4.1 Develop a programme of public awareness, using TV, radio, newspapers and the internet to publicise the migrations undertaken by raptors, their current status, the threats to them and actions that can be taken to conserve them.	All species	All countries with bottleneck sites	Second	Short	Governments in collaboration with NGOs	Programme implemented, and conservation needs of raptors widely understood amongst public
4.2 Develop an awareness programme within forestry, agriculture, fisheries, energy, industry and transport etc to inform decision makers of the current status of raptors, the threats to them and the sectoral actions that can be taken to conserve them.	All species	All	Second	Medium	Governments in collaboration with NGOs	Programme implemented, and conservation needs of raptors widely understood amongst government departs
4.3 Develop a school educational programme and teaching resources to inform school children of the migrations undertaken by raptors, their current status, the threats to them and actions that can be taken to conserve them.	All species	All countries with bottleneck sites	Third	Medium	Governments in collaboration with NGOs	Programme implemented, and conservation needs of raptors widely understood by teachers and taught in schools

Activities	Species	Countries	Priority Level	Time-scale	Organisations	Target
4.4 Establish information notices and provide leaflets at bottleneck sites informing people of their importance for migrating raptors and the measures that they can take to conserve them	All species	All countries with bottleneck sites	Second	Short	Governments and NGOs	Programme implemented, and conservation needs of raptors known within bottleneck sites
Activity 5: Monitor bird of prey populations and carry out conservation research						
5.1 Establish a monitoring network comprising a representative range of sites where systematic and coordinated monitoring of breeding populations and migration numbers (spring and autumn) can be undertaken	All	To be defined	Third	Immediate	Governments, Birdlife International, national ornithological organisations	Monitoring network established and adopted by Signatories
5.2 Design and undertake a coordinated monitoring programme based on the monitoring network established under 5.1	All	To be defined	Third	Ongoing	Governments, Birdlife International, national ornithological organisations	Monitoring guidelines/manual prepared for national and transboundary data collection; data relayed to the Secretariat and included in national reports; breeding and migratory population trends reliably established
5.3 Assess the impacts of habitat change on breeding, passage and wintering populations of raptors, and identify required measures to maintain Favourable Conservation Status	Cat. 1 and 2 species	Asia, Middle East and Africa	Second	Medium	NGOs and research organisations	Habitat problems and required mitigation measures identified

Activities	Species	Countries	Priority Level	Time-scale	Organisations	Target
5.4 Assess the impacts of the use of toxic agrochemicals on breeding, passage and wintering populations of raptors, and identify required measures to achieve and maintain Favourable Conservation Status	Cat. 1 and 2 species	Asia, Middle East and Africa	Second	Medium	NGOs and research organisations	Toxic chemical problems assessed and mitigation measures identified if required
Activity 6: Supporting measures						
6.1 National Plans of Action for migratory raptors	Cat. 1 and 2 species	All	Second	Immediate	Governments, national ornithological organisations	National Plans of Action describing how this Action Plan will be implemented with particular regard for Cat. 1 and Cat. 2 species submitted to the Secretariat before the first meeting of Signatories
6.2 International Plan of Action for migratory raptors	Cat. 1 and 2 species	All	Second	Short	Governments, Birdlife International, national ornithological organisations	International Plan of Action prepared by the Secretariat to address transboundary aspects of implementing this Action Plan, with particular regard for Cat. 1 and Cat. 2 species, submitted to the first meeting of Signatories for approval
6.3 Prepare single species action plans for all globally threatened species, taking account of existing international plans and where necessary extending them to cover the entire African-Eurasian range of each species	Cat. 1 species	All range states of Cat. 1 species	First	Medium	Governments, Birdlife International, national ornithological organisations	International conservation plans developed, approved and being implemented for all globally threatened species

Activities	Species	Countries	Priority Level	Time-scale	Organisations	Target
6.4 Update Tables 1 and 3 according to new information emerging from the monitoring programme	All	All	Third	Ongoing	Secretariat	On the basis of information collected and collated from the Signatories, the Secretariat proposes amendments to Tables 1 and 3 of this Action Plan for approval by the Signatories

Table 3: Important Bird Areas identified by Birdlife International that are known to be important congregatory raptor sites in Africa and Eurasia

Bulgaria
Atanasovo lake
Mandra-Poda complex

Denmark
Gilleleje area
Hellebæk
Korshage, Hundested and surrounding sea area
Marstal Bugt and the coast of south-west Langeland
Skagen
Stevns

Djibouti
Kadda Guéïni – Doumêra

Egypt
Ain Sukhna
El Qa plain
Gebel El Zeit
Ras Mohammed National Park
Suez

Finland
Merenkurkku archipelago

France
Basses Corbières
Col de l'Escrinet
Col de Lizarrieta
Etangs de Leucate et Lapalme
Etangs Narbonnais
Gorges de la Dordogne
Haute chaîne du Jura: défilé de l'écluse, Etournel et Mont Vuache
Haute Soule : Forêt d'Irraty, Organbidexka et Pic des Escaliers
Hautes Corbières
Hautes garrigues du Montpellierais
Massif du Canigou-Carança
Montagne de la Clape
Montagne de la Serre
Monts et Plomb du Cantal
Pointe de Grave
Val d'Allier : Saint-Yorre-Joze
Val de Drôme: Les Ramières-printegarde
Vallée de la Nive des Aldudes-Col de Lindux

Georgia
Kolkheti
Meskheti

Gibraltar (to UK)
Rock of Gibraltar

Greece
North, east and south Kithira island

Iraq
Samara dam

Israel
Cliffs of Zin and the Negev highlands
Hula valley
Jezre'el, Harod and Bet She'an valleys
Judean desert
Judean foothills
Northern Arava valley
Northern lower Jordan valley
Southern Arava valley and Elat mountains
Western Negev

Italy
Aspromonte
Cape Otranto
Costa Viola
Maritime Alps
Mount Beigua
Mount Conero
Mount Grappa
Peloritani mountains
Piave river

Jordan
Aqaba mountains
Jordan valley
Petra area
Wadi Dana – Finan
Wadi Mujib

Kuwait
Al-Jahra Pool Nature Reserve

Latvia
Slitere Nature Reserve

Lebanon
Ammiq swamp

Lithuania
Kuronian spit

Malta
Buskett and Wied il-Luq

Morocco
Cap Spartel – Perdicaris
Jbel Moussa

Palestinian Authority Territories
Jericho
Northern Lower Jordan Valley

Portugal
South-west coast of Portugal

Russia (European)
Caucasus Biosphere Reserve
Chudsko-Pskovski Lake and adjacent areas
Delta of the River Don
Irendyk ridge
Teberdinski Nature Reserve

Saudi Arabia
Taif escarpment
Wadi Jawwah
Wadi Rabigh springs

Spain
Bujeo, Ojén, del Niño and Blanquilla mountain ranges
Cabras, Aljibe and Montecoche mountain range
Cadí mountains
Ceuta
De la Plata mountain range
Guadalquivir marshes
La Janda
Roncesvalles-Irati-Abodi mountain range
Tarifa

Sweden
Bay of Skälderviken
Falsterbo-Bay of Foteviken

Switzerland
Pre-alpine region of Gurnigel

Syria
Jabal Slenfeh

Tunisia
Djebel el Haouaria

Turkey
Bosporus
North-east Turkey
Nur mountains

Yemen
Al-Kadan area
Bab al-Mandab – Mawza
Mafraq al-Mukha
Wadi Rijaf

Published by the Department for the Environment, Food and Rural Affairs,

Printed on material that contains a minimum of 100% recycled fibre for uncoated paper and 75% recycled fibre for coated paper.

www.defra.gov.uk

PB12684