2015 AZA Raptor Taxon Advisory Group

Regional Collection Plan

Third Edition

Submitted:
July 1, 2015

Cover Picture:

The picture on the cover of this Regional Collection Plan is courtesy of Joel Sartore Photography. This image of a California condor is part of his Photo Ark project. As stated in his mission statement:

"Photo Ark is a collection of photographs that documents the world's species that we have a chance of losing. It is a visual connection between the animals and people who can help protect them."

The Raptor TAG is pleased to be able to support Mr. Sartore in his project by using this picture on the cover page for this document.

Acknowledgements:

The Raptor TAG also wishes to thank all the facilities that have helped in the making of this document by contributing to the space survey, reviewing and editing the draft version as well as contributing the photographs that are placed throughout the document.

Table of Contents:

Raptor TAG Mission and Goals ……... 3

Conservation Status of TAXA …….. 5

Raptor TAG Operational Structure …… 6

Raptor TAG Steering Committee Responsibilities.……... 7

Raptor TAG Recommendations…… 7

Species Selection Criteria …….. 8

Decision Tree Process……. 8

Management Categories …… 10

Space Analysis …… 12

Species Summary Table …… 13

Raptor TAG Action Plan …….. 24

Appendices:

Appendix I - Decision Tree for Species Currently Held in North American Collections ..……..…… 25

Appendix II – Summary Table Resources and Definitions…… 26

Appendix III – Management Assessment Criteria Matrix…….. 29

Appendix IV – Animal Program Summary Data …… 30

Appendix V – 2015 Specie Profiles …… 32

Appendix VI – 2014 Raptor TAG Space Survey ……. 74

Appendix VII – Raptor TAG Program Leaders ..……. 79

Appendix VIII – Program Review Table …….. 81

Appendix IX - Program Species Role ……..... 83

Appendix X – Program Goals …….. 85

Appendix XI – List of Non-responsive institutions ……... 88

Appendix XII – Raptor TAG Taxon Listing…….. 89

Raptor Taxon Advisory Group Mission Statement:

The mission of the Raptor Taxon Advisory Group is to coordinate management of captive Falconiformes and Strigiformes in North American collections, as well as to participate in and support relevant conservation efforts both *in situ* and *ex situ*.

With this publication it is a great opportunity for the Raptor TAG to coordinate with the various SSPs, program leaders and facilities to increase spaces for endangered species and/or CITES listed species. Concurrently we can maintain or decrease the number of the most common and native species within our AZA collections. For those not currently involved with listed species there are usually a few niches within your collections to assist programs. Such initiatives have conservation value, safeguard vulnerable species, create greater species management experiences and increase diversity of species for our guests

Goals of the Raptor TAG

- Identify and coordinate the use of space for species in the orders Falconiformes and Strigiformes in North America.

- Identify species that are in need of conservation action through natural history and population reviews and assessments.

- Develop and utilize criteria to select species for captive management and identify the level of management to be recommended for each species.

- Define species/population goals, conservation status and program goals, and communicate these to each AZA institution for every species in the TAG.

- Develop and disseminate husbandry information for raptor species.

- Develop public education programs on conservation issues facing species in this TAG, and promote the use of these materials by member institutions.

- Collaborate with professional organizations focused on training and presentation of raptors in educational settings relating to the conservation efforts of AZA institutions.

- Cooperate with the scientific community in identifying and meeting research needs.

- Cooperate with other national and international conservation organizations to identify and participate in common *in situ* and *ex situ* conservation goals.

- Collaborate with facilities in other regions to optimize management of small captive populations.

- Identify the best possible roles for captive populations of native raptors, which may include phasing out certain species/individuals in order to create additional management space for TAG-emphasized species.

- The TAG encourages all facilities to work collectively towards these objectives and goals.

Photo Credit: Andrea DeMuth, Brookgreen Gardens

TAXA Covered by this TAG

This Regional Collection Plan for the Raptor Taxon Advisory Group includes all species in the orders Falconiformes and Strigiformes. The Handbook of the Birds of the World (vols. 2 & 5), were used as the sole taxonomic reference. According to this literature there are 569 species of raptors represented by 1,430 taxa (sub-species). (A full accounting is attached as Appendix VIII.)

Falconiformes

Cathartidae	**7 species**	**13 taxa**
Pandionidae	**1 species**	**4 taxa**
Accipitridae	**255 species**	**570 taxa**
Sagittariidae	**1 species**	**1 taxa**
Falconidae	**64 species**	**158 taxa**

Strigiformes

Tytonidae	**18 species**	**68 taxa**
Strigidae	**223 species**	**616 taxa**

CONSERVATION STATUS OF TAXA

The following were used as sources of information regarding the conservation status of taxa covered by this plan:

- IUCN 2008. 2008 IUCN Red List of Threatened Species. <www.iucnredlist.org>.
- USFWS Endangered Species Act
- CITES
- BirdLife International (2008) *Threatened birds of the world 2008.* <www.birdlife.org>

The information referenced from these resources is found in the Species Summary section of this RCP and only reflects the species currently held in North American facilities. This TAG also recognizes that during the span of this RCP that there may be some unforeseen event or crisis that may require an alteration or addendum to this plan. In the event that plan recommendations are significantly altered, the TAG will communicate with WCMC and the IR's regarding the recommended changes.

RAPTOR TAG OPERATIONAL STRUCTURE

The Raptor TAG Steering Committee:

- Scott Tidmus, Disney's Animal Kingdom- Chair – scott.tidmus@disney.com - (407) 938-2105
- Jenny Barnett, Binder Park Zoo- Vice Chair - jbarnett@binderparkzoo.org - (269) 979-1351 ext. 158
- Steve Sarro, National Zoological Park – Secretary - ssarro@si.edu – (202) 633-3242
- Ed Diebold, Riverbanks Zoo - ediebold@riverbanks.org - (803) 602-0852
- Susie Kasielke, Los Angeles Zoo - susie.kasielke@lacity.org - (323) 644-4745
- Michael Mace, San Diego Zoo Safari Park - mmace@sandiegozoo.org - (760) 738-5077
- David Rimlinger, San Diego Zoo - drimlinger@sandiegozoo.org - (619) 557-3978
- Tom Schneider, Detroit Zoo - tschneider@detroitzoo.org - (248) 398-0903 ext. 3128
- Katy Unger, Fort Worth Zoo - kunger@fortworthzoo.org - (817) 759-7170
- Fred Beall, Zoo New England - fbeall@zoonewengland.com - (774) 222-3049
- James Balance, Zoo Atlanta - jballance@zooatlanta.org - (404) 624-5691
- R. Harrison Edell, Dallas Zoo – harrison.edell@dallaszoo.com – (469) 554-7201

The following advisors support this TAG:

- Veterinary Advisors:
  Dr. Patrick Redig, University of Minnesota Raptor Center; <redig001@umn.edu>
  (612) 624-4969
  Dr. Chris Bonar, Dallas Zoo; chris.bonar@dallaszoo.com - (216) 635-3334

- Field Conservation:
  Dr. Michael Wallace, Zoological Society of San Diego;
  mwallace@sandiegozoo.org –
  (760) 291-5482
  Dr. Mike McGrady, Natural Research Ltd.; mikejmcgrady@aol.com – (+43) 2732 72028

- Behavior Advisor (training, enrichment, etc.):
  Steve Martin, Natural Encounters, Inc.; natencount@aol.com - (407) 938-0847

- Education Advisor:
  Jacque A. Williamson, Brandywine Zoo; Jacque.williamson@state.del.us –
  Bridget Ebert, St. Louis Zoo; ebert@stlzoo.org -

- Nutrition Advisor: None at this time

- Advisors-at-large:
  Jemima Parry-Jones MBE, International Director,
  International Center for Birds of Prey; jpj@icbp.org - +44 (0) 1531820286

- Liaison with EAZA:
  Mark Habben, Falconiformes TAG Chair, ZSL London Zoo; mark.habben@zsl.org
  +44 (0) 2074496453
- Kirsi Pynnonen-Oudman, Dr., Falconiforme Vice Chair, Helsinki Zoo;
  Kirsi.pynnonen@hel.fi (+358) 9 310 37 882

RESPONSIBILITES OF STEERING COMMITTEE MEMBERS

Steering Committee members serve staggered, 3-year terms and have a current total of 12 members.

- Dedicate sufficient time to carry out TAG duties.
- Be prepared to chair TAG subcommittees and Specialist Groups.
- Review and vote on TAG policies.
- Review and vote on Studbook Keeper, SSP Coordinator applications.
- Internet and e-mail access required.

Voting Procedure: Two-Thirds approval by the Steering Committee is required for a majority.

The Secretary is responsible for conducting elections and taking meeting minutes.

RAPTOR TAG RECOMMENDATIONS

The Raptor TAG encourages all participating institutions and facilities to abide by the following:

- The TAG encourages all institutions to cooperate fully with the various SSP Breeding and Transfer Plans.
- All institutions must participate fully in the SSP partnership and process for relevant taxa.
- Microchip identification is recommended for species covered by the TAG to aid in long-term identification of individuals.
- AZA accession and deacquisition policies should be followed at all times.
- Institutions are encouraged to focus on captive husbandry efforts of recommended species to increase genetic diversity and reduce impact on wild populations.
- The TAG recommends that when individuals need to be restrained from flight it should be done by feather clipping instead of pinioning whenever feasible.
- Shows and demonstrations should be evaluated and advised by licensed falconers at the level of general falconer or higher. Presentations should have an education component with an emphasis on conservation issues and support.
- A large number of spaces in zoos are utilized by non-releasable North American species. It is encouraged that institutions keep these North American species in only appropriate geographically zoned exhibits so as not to encroach on spaces available for management of recommended species.

- Where common, North American species are on exhibit, facilities are encouraged to acquire non-flighted, rehabilitated specimens that may have more modest space requirements in order to reserve larger, potential breeding spaces for native and non-native species.

DECISION TREE

A decision tree was used to help categorize species covered by the TAG. If a population existed in North American collections, its viability was assessed. The capacity and space in North American institutions was determined through data from the 2014 Raptor TAG space survey and ZIMS data. The capacity/space information was considered as the decision tree was applied to each species since space availability is relevant to the long-term viability of each population. The resulting category listing was used to place the species into the appropriate management program. See Appendix I.

SELECTION CRITERIA

The AZA-recommended criteria (including the Management Assessment Criteria table), interpreted specifically in relation to raptors, were used in selecting species for inclusion or exclusion within this RCP. Only species currently held in AZA facilities were considered, primarily due to space limitations. Additional species may be included in the future if there is a clear need and space becomes available.

Raptors are typically long-lived species that have low reproductive rates. While some species clearly require careful population management, many captive populations with very low numbers have persisted for decades with minimal active management, reproduction or recruitment. Given the long history of the sport of falconry, many species of raptors exist in large numbers within the private sector, where they are often bred more reliably than in public facilities. Raptor species are the most popular group of birds used in educational demonstrations and shows. Native species, primarily rehabilitated wild birds, make up a large proportion of the captive AZA populations. These factors were important considerations in determining whether a species would be recommended for inclusion in the RCP and at what management level.

For each species, it was first determined whether there was a compelling conservation, education, research or display need? These categories were defined as follows:

- Display value was attributed to species that have high visitor impact, have reliable husbandry protocols and are in demand by AZA facilities.
- Educational value was attributed to species that can be interpreted to illustrate important concepts about raptors or birds in general, particularly if conservation messages could be incorporated. Common species may serve as representatives of their wild, endangered counterparts. Taxonomically unique species were considered to have both educational and display value.
- Research value was attributed to species that are inadequately understood in captivity; or in the wild when captive research might increase this information. Proposed research might include development of basic husbandry, propagation, nutrition, behavior and/or medical knowledge.

- Conservation value was attributed to all species in need of conservation action by AZA facilities. This would include the need for a captive genetic reservoir that may be used for reintroduction in the future as well as the potential to affect in situ conservation.

Second was if there was a viable population in AZA facilities.
Viable populations include those:

- which are genetically and demographically self-sustaining in this region or
- for which additional founders are available from the wild (either via capture or rehabilitation), other regions and/or the private sector or
- for which additional individuals (not necessarily for breeding) are available from the wild (rehabilitation) and/or the private sector (non-endangered species bred for falconry) and
- for which husbandry expertise with the same or similar species already exists or could reasonably be developed.

For viable populations, it was next determined whether there was available space, interest and/or expertise.
compelling display, education, research or conservation need for the species. These categories were defined as follows:

- Display value was attributed to species that have high visitor impact, have reliable husbandry protocols and are in demand by AZA facilities.
- Educational value was attributed to species that can be interpreted to illustrate important concepts about raptors or birds in general, particularly if conservation messages could be incorporated. Common species may serve as representatives of their wild, endangered counterparts. Taxonomically unique species were considered to have both educational and display value.
- Research value was attributed to species that are inadequately understood in captivity; or in the wild when captive research might increase this information. Proposed research might include development of basic husbandry, propagation, nutrition, behavior and/or medical knowledge.
- Conservation value was attributed to all species in need of conservation action by AZA facilities. This would include the need for a captive genetic reservoir that may be used for reintroduction in the future as well as the potential to affect *in situ* conservation.

For viable populations with a compelling reason for inclusion in the RCP, the availability of space was then evaluated. This was based on the current and projected numbers reported by AZA facilities in the 2014 space survey. Species for which space was not currently or potentially available were not recommended.

If a viable population did not already exist, the availability, space and need were evaluated. If all three criteria were met, it was recommended that the species be a candidate species. If these criteria were not met, the species was recommended to be phased out**;** or if not already in AZA facilities, not recommended.

Once it was determined that a species should be maintained in AZA collections, the management category for the population was determined. Species not requiring genetic and demographic management were assigned to the Red SSP category. Species requiring a basic

level of genetic and demographic management were assigned to the Yellow SSP category. Species requiring the highest level of genetic and demographic management were assigned to the Green SSP category. The definition of these categories is included in the next section.

MANAGEMENT CATEGORIES

Once it was determined that a species would be included in the RCP, a decision was made regarding what type of management program would be appropriate. The Management Assessment Criteria table was used to evaluate each of the programs to ensure compliance with the WCMC guidelines. Each species was assigned to one of the following management categories based on this review:

Green SSP Programs

- Green SSP Programs have a population size equal to or greater than 50 individual.
- This population is able to retain > 90.0% GD for 100+ years or 10+ generations.
- The population is presently sustainable demographically with a sufficiently large population size and a positive growth rate to reach 100 years or 10 generations.

Yellow SSP Program

- Yellow SSP Programs have a population size (total N at the time of population planning) equal to or greater than 50 individuals.
- The population is not able to retain at least 90.0% GD over for 100+ years or 10+ generations.
- The population may have never been formally planned, or was planned more than 5 years ago, so that the population sustainability score cannot be properly assessed.

Red SSP Programs

- Red SSP Programs have a population size between 20 and 49 individuals unless accepted models can demonstrate long-term sustainability.

Candidate Programs

- Candidate Programs do not meet the minimum criteria to be an SSP Program.
- Candidate Programs may have a population size fewer than 20 individuals, and/or
- Candidate Programs may have fewer than 3 participating AZA member institutions.
- Candidate Program populations may meet minimum SSP criteria, but are not designated as an SSP Program because they do not yet have a published AZA Regional Studbook.

Phase-out and phase-in species

- "Phase-out species" refer to species currently held within AZA the TAG recommends the specific action of removing or reducing the population to reallocate resources toward another formally managed Animal Program. This may be indicated as an active process (sending animals to other zoological regions) or over time (through attrition), for example.
- "Phase-in species" refer to species currently unrepresented within the AZA where the TAG recommends the specific action of bringing into AZA member facilities. If

phase-in species are listed, the TAG should develop specific goals for this population to be added.

TAG monitored populations
The TAG may include an appendix that lists additional species that, although not recommended to be a SSP or Candidate Program, are frequently cared for in AZA member institutions (e.g., budgies, lorikeets, some fish and invertebrates, American alligators, etc.). The TAG may choose to track or monitor these populations informally, and may recommend them for formal AZA Animal Programs in the future. However, until that time, these will be considered unmanaged populations that the TAG only wishes to monitor informally. Only those taxa selected using the Species Selection Criteria may be further designated by the TAG as an AZA SSP and/or Candidate Programs.

Not Recommended
Species not currently in AZA institutions and the TAG recommends it not be brought into a captive management program at this time.

Appendix VI lists all supported raptor programs with leaders and studbook managers.

PROGRAM UPDATES

Since the last published RCP the Raptor TAG reports the removal from AZA facilities the following 17 species. All of which were single or a few total numbers in the population and over time they have been phased out.

Northern Goshawk	Eurasian Sparrowhawk	Sharp-shinned Hawk
White-tailed Hawk	Red-backed Hawk	Black Kite
Tawny Eagle	Black-hawk Eagle	Barbary Kestrel
Saker Falcon	Rufous banded Owl	Boobook Owl
Ural Owl	Mottled Owl	Tawny Owl
Bearded Vulture	Ferruginous Pygmy Owl	

In addition to the species no longer in our collections there have been 4 species added to our collections. These have been added to the population assessments.

Short-tailed Hawk	Aplomado Falcon	Pharoah's Eagle Owl
Mountain Pygmy Owl		

One additional hybrid was added to the collection. We will not be monitoring the status of this hybrid.

Gyrfalcon/Saker Hybrid

Photo Credit: Cathy Burkey, Dallas Zoo

SPACE ANALYSIS

In July of 2014 the Raptor TAG sent a space survey to all 228 AZA institutions requesting information on their current and future raptor collections. The goal of this survey was to determine what space was being allocated to raptors, how they were being housed, exhibited and managed as well as what the future needs of these institutions may be. Of the 228 AZA institutions, 156 are participating members of the Raptor TAG with designated Institutional Representatives (IR's). Non-member participants include aquariums and museum collections with small raptor populations.

Of the 156 participating member institutions, 145 responded to the space survey, a response rate of 93%. We feel confident that this was an accurate snapshot of the current raptor population and these results have been utilized in directing this collection plan. This survey has also given us the opportunity to address future needs, and will be most useful within the next five years as a measuring device for the next update of the RCP.

The results of the space survey are attached as Appendix V.

The list of non-responsive institutions for the space survey is located in Appendix IX. They were sent several invitations to participate and follow up phone calls and messages as we came to the conclusion of the review process.

TARGET POPULATIONS

Target populations for the summary table were decided on several levels. Program species target populations were set with assistance back from the PMC and the program leader, using their best case scenario for success.

Monitored species targets were defined using a combination of current survey numbers as well as current ZIMS population sizes. The numbers from the 2009 RCP were used also to give a feel as to what the population trends seem to be in regard to these species. The exceptions will be species that the space survey shows are in demand and growth is planned to happen within the next five years.

Photo Credit: Cathy Burkey, Dallas Zoo

SUMMARY TABLE

The resources and definitions used to establish the summary table are listed in Appendix II; they have been separated to help manage the flow of this document.

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
New World Vultures									
Turkey Vulture *Cathartes aura + C. a. aura + C. a. ruficollis + C. a. septentrionalis*	LC		III	167	96	172	115	Monitored Program	❶ Breeding not recommended; population size needs to be reduced; replace with a flagship species
American Black Vulture *Coragyps atratus*	LC		III	57	36	68	40	Monitored Program	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended; reduce population
California Condor *Gymnogyps californianus*	CE	E	I	80	55	115	150	YELLOW SSP	❶ Existing SSP producing birds for release to the wild ❷ Mike Wallace, San Diego Zoo International Studbook Keeper: Michael Mace, San Diego Zoo Safari Park + Experimental Population, non-essential in Arizona, Nevada and Utah
King Vulture *Sarcorhamphus papa*	LC		III	91	67	107	120	GREEN SSP	❶ Popular exhibit and education species ❷ Shelly Collinsworth, Fort Worth Zoo + declining population
Andean Condor *Vultur gryphus*	NT	E	I	77	40	69	85	YELLOW SSP	❶ Existing SSP providing birds for release to the wild ❷ Mike Mace, San Diego Zoo Safari Park Regional Studbook Keeper, Ron Webb, San Diego Zoo Safari Park + declining population

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Old World Vultures									
Eurasian Black Vulture (Cinereous) *Aegypius monachus*	NT		II	48	47	45	70	YELLOW SSP	❶ Existing SSP ❷ Mary Jo Willis, Denver Zoo + declining population
Palm-nut Vulture ***Gypohierax angolensis***	LC		II	8	5	6	15	Monitored Population	❶ Taxonomic unique species + stable population
African White-backed Vulture *Gyps africanus*	EN		II	18	9	12	50	RED SSP	❶ Popular exhibit species but not bred sufficiently – additional founders available – needs emphasis on captive reproduction to become self-sustaining population ❷ Susie Kasielke, Los Angeles Zoo + declining population
Oriental White-backed Vulture *Gyps bengalensis*	CE		I	1	1	1	0	Phase out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management. Due to declining wild population and conservation work being done it is not a program for this region. + declining population
Cape vulture *Gyps coprotheres*	VU		II	25	31	32	50	RED SSP	❶ In demand as exhibit species – additional founders available – potential for release to the wild if sufficient numbers produced ❷ Susie Kasielke, Los Angeles Zoo + declining population
Griffon vulture *Gyps fulvus + G. f. fulvus*	LC		II	4	1	3	0	Phase out	❶ Investigate potential to send to EAZA facilities + population increasing

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Ruppell's griffon vulture *Gyps rueppelli + G. r. rueppelli*	EN		II	45	51	58	75	YELLOW SSP	❶ Popular exhibit species but not bred consistently – additional founders available – needs emphasis on captive reproduction to become self-sustaining population. ❷ Bryan Emberton, Disney's Animal Kingdom + declining population
Hooded Vulture *Necrosyrtes monachus*	EN		II	30	32	39	50	RED SSP	❶ Popular exhibit species with sufficient numbers to become self-sustaining captive population ❷ Tom Schneider, Detroit Zoo +declining population
Egyptian Vulture *Neophron percnopterus + N. p. ginginianus + N. p. percnopterus*	E		II	4	5	3	12	Monitored Program	❶ Popular show species + declining population
Red-headed Vulture *Sarcogyps calvus*	CE		II	1	1	1	0	Phase out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management in this region. + declining population
Lappet-faced Vulture *Torgos tracheliotus*	VU		II	26	25	27	50	RED SSP	❶ Popular exhibit species but not bred sufficiently – additional founders available – needs research to determine how many should be imported to achieve population goals – needs emphasis on captive reproduction to become self-sustaining population ❷ Debbie Milligan, Dallas Zoo + declining population
White-headed Vulture *Trigonoceps occipitalis*	VU		II	2	2	2	0	Phase out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management + declining population

Common Name *Scientific Name*	Status			Population size				Management category	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	USFWS	CITES	2009 RCP Survey Numbers	Current 2015		Target		
					Space Survey	ZIMS Data			
Hawks, Eagles, etc…									
Cooper's Hawk *Accipiter cooperii*	LC		II	8	1	10	10	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + increasing population
Short-tailed Hawk *Buteo brachyurus*	LC		II	0	1			Phase Out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management + increasing population
Jackal Buzzard *Buteo rufofuscus*	LC		II	2	1	1	0	Phase Out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management + population stable
Red-tailed Hawk *Buteo jamaicensis* + *B. j. borealis* + *B. j. calurus* + *B. j. costaricensis* + *B .j. hadropus* + *B j. harlani* + *B. j. kiemsisi* + *B. j. krideri* + *B. j. umbrinus*	LC		II	138	105	244	187 .	Monitored Program	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended; Reduce population. + increasing population
Rough-legged Hawk *Buteo lagopus* + *B. l. lagopus* + *B. l. sanctijohannis*	LC		II	17	6	11	15	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + population stable
Red-shouldered Hawk *Buteo lineatus* + *B. l. alleni* + *B. l. linaetus*	LC		II	19	9	34	18	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + increasing population
Grey Hawk *Buteo nitidus*	LC		II	1	1	17	0	Phase Out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management + population unknown

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Broad-winged Hawk *Buteo platypterus + B. p. platypterus*	LC		II	11	5	12	10	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended +increasing population
Ferruginous Hawk *Buteo regalis*	LC		II	6	5	9	12	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + ncreasing population
Hawai'ian Hawk *Buteo solitarius*	NT	E	II	9	2	6	15	Monitored Program	❶ Federally endangered species -conservation message; has a fieldwork component #Proposed for delisting + population stable
Swainson's Hawk *Buteo swainsonii*	LC		II	17	15	27	30	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + population stable
Harris's Hawk *Parabuteo unicinctus + P. u. harrisi + P. u. superior*	LC		II	102	76	168	115	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended - reduce numbers + declining population
Northern Harrier *Circus cyaneus + C. c. hudsonius*	LC		II	2	1	1	5	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + declining population
Mississippi Kite *Ictinia mississippiensis*	LC		II	5	5	19	10	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + increasing population

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Bald Eagle *Haliaeetus leucocephalus* + *H. l. alascanus* + *H. l. leucocephalus*	LC	T	I	156	172	294	267	Monitored Program	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding recommended only in conjunction with programs for releases to the wild #Species delisted due to recovery + increasing population
White-bellied Sea Eagle *Haliaeetus leucogaster*	LC		II	1	2	0	0	Phase Out	❶Currently only one bird shows up on space survey and ISIS. + declining population
Steller's Sea Eagle *Haliaeetus pelagicus* + *H. p. pelagicus*	VU		II	10	21	10	20	RED SSP	❶ Species in decline in the wild likely to breed well in captivity and is a cold-hardy species suitable for northern facilities – potential genetic reservoir for reintroduction if needed ❷ Beau Parks – San Diego Zoo + declining population
African Fish Eagle *Haliaeetus vocifer*	LC		II	11	8	12	20	Monitored Program	❶ Popular exhibit, education and show species + population stable
Golden Eagle *Aquila chrysaetos*+ *A. c. canadensis* + *A. c. chrysaetos* + *A. c. homeryi* + *A. c. japonica*	LC		II	35	22	106	65	Monitored Program	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + population stable
Harpy Eagle *Harpia harpyja*	NT	E	I	14	10	11	30	RED SSP	❶ Species in decline in northern part of range with high potential as a conservation flagship species – founders are available from captive populations in other regions. ❷ Janice Owlett, San Diego Zoo + declining population

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Martial Eagle *Polemaetus bellicocus*	VU		II	0		6	0	Phase Out	❶ Species has only recently been available with any numbers – breeding not recommended at this time. + declining population
Ornate Hawk-eagle *Spizaetus ornatus*	NT		II	2	2	7	15	Phase Out	❶ Husbandry research model for endangered forms ❷ Species Champion: Daryl Richardson, Dallas World Aquarium + declining population
Crowned Hawk-eagle *Stephanoaetus coronatus*	NT		II	7	6	4	10	Phase Out	❶ Species is gaining interest as a display and demonstration species – husbandry is similar to other large forest eagles, so species is a husbandry research model + declining population
Bateleur Eagle *Terathopius ecaudatus*	NT		I	21	12	19	30	Phase Out	❶ Unusual species not bred consistently – husbandry research needed to develop reliable propagation techniques + declining population
Secretary Bird *Sagittarius serpentarius*	VU		II	25	24	30	35	RED SSP	❶ Popular exhibit species with sufficient numbers to become self-sustaining captive population ❷ Michelle Handrus, San Diego Zoo Safari Park + declining population
Osprey *Pandion haliaetus*	LC			0	2	25	25	Phase Out	❶ Native species popular for exhibit/education –breeding not recommended. Taxonomic unique species. + increasing population

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Crested Caracara *Polyborus plancus* + *P. p. auduboni*	LC		II	19	16	35	25	Phase Out	❶ Native species popular for exhibit/education –breeding not recommended + increasing population
Falcons									
Merlin	LC		II	1	3	7	8	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + population stable
Prairie Falcon *Falco mexicanus*	LC		II	6	2	4	10	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + increasing population
Peregrine Falcon *Falco peregrinus* + *F. p. anatum* + *F. p. pealei* + *F. p. tundrius*	LC		I	31	22	38	40	Monitored Program	❶ Native species with strong conservation message popular and recommended for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended unless in conjunction with sanctioned release program. + population stable
Aplomado Falcon *Falco femoralis*	LC		II	0	2	0	0	Phase Out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management + population decreasing
American Kestrel *Falco sparverius* + *F. s. paulus* + *F s. sparverius*	LC		II	121	34	94	110	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended - reduce population + population stable

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Lanner Falcon *Falco biarmicus*	LC		II	8	5	11	8	Phase Out	❶ Popular education species available through captive breeding in the private sector + increasing population
Gyrfalcon	LC		II		3			Phase Out	❶ Popular education species available through captive breeding in the private sector = stable population
Lagger Falcon	NA		II		2			Phase Out	❶ Education species available through captive breeding in the private sector ▱□□◆●♋♦♓□■ ◆■ &■□⬩■
African Pygmy Falcon *Polihierax semitorquatus*	LC		II	42	38	30	70	RED SSP	❶ Popular exhibit and education species ❷ Nicole LaGreco, San Diego Zoo + population stable
Barn Owls									
Barn Owl *Tyto alba* + *T. a. alba* + *T. a. delicatula* + *T. a. pratincola*	LC		II	183	102	195	150	Monitored Program	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended - reduce population + population stable
Typical Owls									
Northern Saw Whet Owl *Aegolius acadicus*	LC		II	17	5	11	10	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + declining population
Short-eared Owl *Asio flammeus* + *A.f. flammeus* + *A.s.sandwichensis*	LC		II	10	2	3	5	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + declining population
Long-eared Owl *Asio otus* + *A. o. otus* + *A. o. wilsonianus*	LC		II	15	4	8	10	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended +population stable

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Burrowing Owl *Athena cunicularia* *A.c. floridana* *A.c. hypugaea*	LC		II	126	69	138	170	Yellow SSP	❶ Popular exhibit and education species – with sufficient numbers and breeding to maintain self-sustaining captive population ❷ Yvonne Strode, Glen Oak Zoo + declining population
Great-horned Owl *Bubo virginianus* + *B. v. algistus* + *B. v. nacurutu* + *B. v. pacificus* + *B .v. virginianus*	LC		II	232	90	135		Monitored Program	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended – reduce population + population stable
Elf Owl *Micrathene whitneyi*	LC		II	5	1	2	5	Phase Out	❶ Native species sometimes used for exhibit/education – breeding not recommended + declining population
Snowy Owl *Nyctea sandiaca*	LC		II	43	36	62	150	Yellow SSP	❶ Popular exhibit and education species with sufficient numbers to become self-sustaining captive population. This species is susceptible to WNV, which may affect any institution's desire/ability to work with it. ❷ Justin Hickman, Chicago Zoological Society + declining population
Megascops Screech Owl (common & Eastern) *Otus asio* + *O. a. asio* + *O. a. swenki*	LC		II	242	121	228	150	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended - reduce population + increasing population
Megascops Western Screech Owl *Otus kennicotti*	LC		II	19	17	7	20	Phase Out	❶ Native species sometimes used for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended + declining population

Common Name ***Scientific Name***	**Status**			**Population size**				**Management category**	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	**USFWS**	**CITES**	**2009 RCP Survey Numbers**	**Current 2015**		**Target**		
					Space Survey	**ZIMS Data**			
Oriental Bay Owl *Phodilus badius* + *P.b.badius*	LC		II	4	2	2	0	Phase Out	❶ Species of interest but not sufficient numbers to maintain captive population. + population stable
Spotted Owl *Strix occidentalis* + *S. o. caurina*	NT		II	3	1	3	6	Phase Out	❶ Native species used for exhibit/education to illustrate conservation issues – need for captive breeding is not currently indicated – acquire rehabilitated, non-releasable specimens as space permits + declining population
Barred Owl *Strix varia* + *S. v. georgica* + *S. v. varia*	LC		II	110	59	134	100	Phase Out	❶ Native species popular for exhibit/education – sufficient numbers of non-releasable birds available through wildlife rehabilitators – breeding not recommended - reduce population + increasing population
Eurasian Eagle-owl *Bubo bubo* + *B.b.bubo*	LC		II	51	36	72	70	YELLOW SSP	❶ Popular education species with sufficient numbers to become self-sustaining captive population ❷ Harrison Edell, Dallas Zoo + declining population
Verreaux's Eagle-owl *Bubo lacteus*	LC		II	11	15	14	20	Candidate	❶ Popular education species, great exhibit value ❷ Harrison Edell, Dallas Zoo + population stable
Pharoah Eagle-owl *Bubo ascalaphus*	LC		II	0	1		1	Phase out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management + population stable
White-faced Scops Owl *Ptilopsis leucotis* + *P. l. granti* + *P. l. leucotis*	LC			11	3	4	15	Monitored Program	❶ Common species to serve as a husbandry model and conservation ambassador. + population unknown
Spectacled Owl *Pulsatrix perspicillata* + *P.p.perspicillata*	LC		II	73	41	72	85	YELLOW SSP	❶ Popular exhibit species with sufficient numbers to continue as a self-sustaining captive population ❷ Steve Sarro, National Zoo + population stable

Common Name *Scientific Name*	Status			Population size				Management category	❶ Conservation Function ❷ Coordinator/Manager + World Population Trend
	IUCN	USFWS	CITES	2009 RCP Survey Numbers	Current 2015		Target		
					Space Survey	ZIMS Data			
Mountain Pygmy Owl *Glaucidium gnoma*	LC		II	0	1		1	Phase Out	❶ Insufficient numbers in captivity and competes for space with other species identified as higher priority for management + declining population
Great Gray Owl *Strix nebulosa* + *S. n. lapponica* + *S. n. nebulosa*	LC		II/III	9	10	11	10	Phase Out	❶ NA species, winter hardy + population stable

RAPTOR TAG ACTION PLANS

- California condor reintroduction – Mike Wallace and Michael Mace
    - Continue to support captive breeding efforts and assist where needed for release programs.

- Andean condor reintroduction – Michael Mace
    - Support the SSP with specimen for the Colombian release programs.

- Eurasian Black Vulture SSP – Artificial Insemination project at Denver – Mary Jo Willis
- Eurasian Black Vulture SSP - Support of in situ field work with Ikh Nart Nature Reserve, Mongolia. – Denver Zoo – Mary Jo Willis

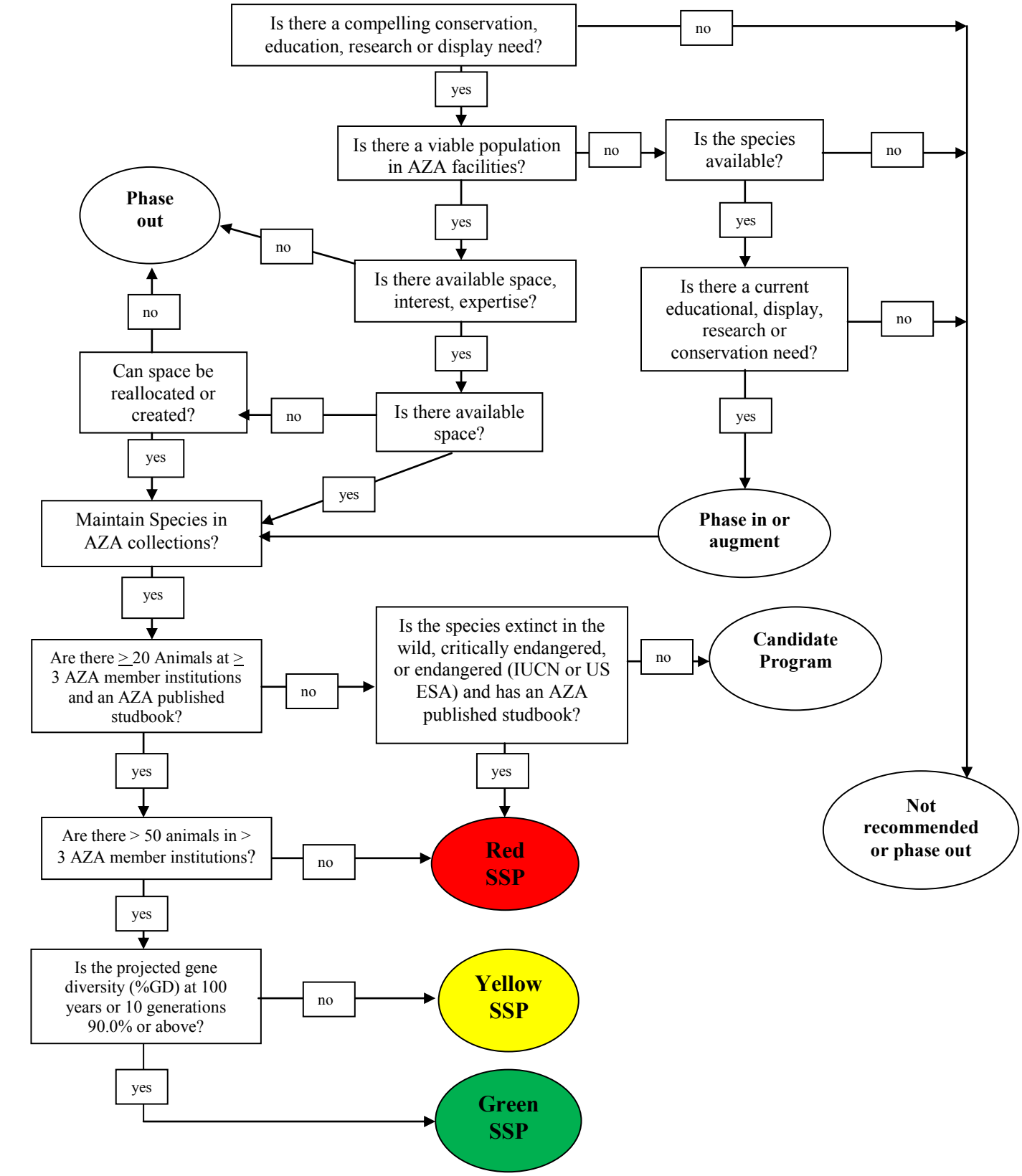
- Northern Spotted Owl Recovery Plan – Woodland Park Zoo is working with the British Columbia Ministry of Forests, Lands and Natural Resources to re-build and restore the Northern Spotted Owl - Mark Myers

- Asian Vulture Initiative – This project is a continuation of the work began over 5 years ago in efforts to support and assist in the protection and recovery of the several Asian vulture species. These species are in jeopardy of extinction due to a chemical drug used on cattle. Currently the program is in the recovery phase and there are now several breeding facilities being supported by AZA facilities to assist in the recovery process. The two recent earthquakes in Nepal have not damaged any of these facilities but support efforts are underway to help the communities around the facilities. Scott Tidmus, Disney's Animal Kingdom.

    - Continue to develop animal care manuals for all taxa covered by this TAG. Currently finalizing the Owl Animal Care Manual. The Condor Animal Care Manual is completed. Work will continue on the next taxon once the Owl manual is finalized.

Appendix I

Raptor TAG Program Decision Tree



Appendix II

Summary Table Resources and Definitions

- Current population size is from January ZIMS data, it is known that not all institutions report using ZIMS, but as it is generally accepted by AZA we will use this data to help evaluate what is documented. We understand this may lead to minor discrepancies but feel it is accurate to be paired with the space survey to evaluate the species.
- Target populations are derived from the summer 2014 Space Survey. For complete data from the space survey, please see Appendix V
- For population status, if the area is left blank it infers no information is available in regard to those particular resources.
- In the last column we list the conservation function for the species as well as the manager of that population if it is at program level. And finally we list what the current global population status is according to the IUCN Red Data List.
- For population status in Appendix VIII, the term NGT refers to the species being "Not Globally Threatened" meaning widespread and abundant with increasing range.
- IUCN Definitions – as taken from the IUCN Red Data List Categories and Criteria, Version 3.1.
    - Extinct (EX) – A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
    - Extinct in the Wild (EW) – A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population/s well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
    - Critically Endangered (CE) – A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (see IUCN Red Data List Categories and Criteria, Version 3.1), and it is therefore considered to be facing an extremely high risk of extinction in the wild.
    - Endangered (EN) – A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered (IUCN Red Data List Categories and Criteria, Version 3.1), and it is therefore considered to be facing a very high risk of extinction in the wild.
    - Vulnerable (VU) – a taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable (IUCN Red Data List Categories and Criteria, Version 3.1), and is therefore considered to be facing a high risk of extinction in the wild.

- Near Threatened (NT) – A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.
- Least Concern (LC) – A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.
- Data Deficient (DD) – A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.
- Not Evaluated (NE) – a taxon is Not Evaluated when it has not yet been evaluated against the criteria. (IUCN Red Data List Categories and Criteria, Version 3.1).

- USFWS definitions – as taken from the Fish and Wildlife Service Glossary of terms:
  - Endangered – An animal or plant species in danger of extinction throughout all or a significant portion of its range.
  - Threatened – An animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

- CITES Definitions – as taken from the terminology section of the CITES website:
  - Appendix I - includes 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.

  - Appendix II - includes i) all species which although not necessarily now threatened with extinction may become so unless trade in specimens of these species is subject to strict regulation in order to avoid utilization incompatible with their survival; and ii) other species which must be subject to regulation in order that trade in specimens of certain species referred to in subparagraph (a) above may be brought under effective control [e.g. species that are similar in appearance to those included in Appendix I].

  - Appendix III - includes 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 cooperation of other Parties in the control of trade.

- Management Assessment Criteria Table – This table was developed by WCMC to assist TAGs in determining the appropriate level of population management for their program species. This table was used in review of the species currently found within AZA institutions. This review was done by members of the steering committee and in special cases the experience and knowledge of the specific species was used to evaluate their level of management. Any variance in the MAC tool and the decision of the TAG steering committee is explained following the evaluation chart – Appendix III.

Photo Credit: Joseph V. Labolito/Temple University, Elmwood Zoo

Appendix III

Management Assessment Criteria Matrix

	Green SSP Program	Yellow SSP Program	Red SSP Program	Candidate Program
AZA Policies				
AZA Acquisition, Transfer and Transition Policy	Required	Required	Required	Required
AZA Code of Professional Ethics	Required	Required	Required	Required
AZA Full Participation in SSP Program Policy	Required	Voluntary	Voluntary	NA
AZA Animal Management Reconciliation Policy	Required	Not Required	Not Required	NA
WCMC Approval of Sustainability Partners	Required	Not Required	Not Required	Not Required
Sustainability Criteria				
Minimum population size (N)*	50	50	20	NA
Minimum number of participating AZA member institutions*	3	3	3	NA
Projected gene diversity (%GD) at 100 years or 10 generations	90.0% or above	Less than 90.0%	Less than 90.0%	NA
Cooperative Management				
TAG recommended Animal Program in RCP	Required	Required	Required	Required
AZA Regional Studbook	Required	Required	Required	Not Required
Formal population planning by PMC, PMC Adjunct or SPMAG Advisor	Required	Required	Required	Not Required
Management Group	If Needed	If Needed	If Needed	If Needed
Accountability				
Develop three Program goals	Required	Required	Required	Required
AZA and WCMC oversight	Yes	Yes	Yes	No
Breeding and Transfer Plan published at least every 3 years	Required	Required	Required	Not Required
AZA Regional Studbook published at least every 3 years	Required	Required	Required	Not Required
AZA Regional Studbook Keeper must take Population Management 1	Required	Required	Required	Recommended
Program Leader must take Population Management 2	Recommended	Recommended	Recommended	Recommended

Appendix IV

ANIMAL PROGRAM SUMMARY DATA

Common Name (*Genus species*)	Date of Last Breeding and Transfer Plan	Current Population Size (N)	Current Number of Participating Institutions	%GD at 100 years or 10 generations)	SSP Program Designation	5 year Target Population Size (N)	Space Needed (target population size - current space)	Recent 5 Year Population Trend (increasing, decreasing, or stable)	USFWS IUCN CITES
King vulture	Oct. 14 2014	52.53.17	56	97.35	Green SSP	120	Yes	Increasing	NL LC III
Andean Condor	April 4, 2013	31.39	37	84	Yellow SSP	84	42	Stable	EN EN I
California Condor		201	7	Not calculated	Yellow SSP				EN EN I
Eurasian Black vulture	Dec. 30 2013	24.29.1	23	79.23	Yellow SSP	64	Increase holding space for 5 pairs	Increasing	NL NT II
Ruppell's vulture	Mar. 16 2015	27.28.2	14	76.5	Yellow SSP	75	Yes	Increasing	NL EN II
Burrowing Owl	Dec. 4 2014	62.73.12	51	57.3	Yellow SSP	150	Increase by 3	Increasing	LC
Spectacled Owl	April 2015	37.32.15	34	72.3	Yellow SSP	85	Need more exhibits vs education spaces	stable	LC

Common Name (*Genus species*)	Date of Last Breeding and Transfer Plan	Current Population Size (N)	Current Number of Participating Institutions	%GD at 100 years or 10 generations)	SSP Program Designation	5 year Target Population Size (N)	Space Needed (target population size - current space)	Recent 5 Year Population Trend (increasing, decreasing, or stable)	USFWS IUCN CITES
Snowy Owl	April 18 2014	33.35.4	40	17.6	Yellow SSP	150	Need 40 spaces	Stable	NL LC II
Eurasian Eagle Owl		61.52.0		73.1	Yellow SSP				
African White-backed vulture	June 2009	7.8.0	6	75	Red SSP	25	Need 10 spaces	Decreasing	NL EN II
Cape Griffon vulturee	June 2009	16.15.0	6	76	Red SSP	50	Need 19 spaces	Increasing	NL VU II
Lappet-faced vulture	July 2015	14.14.0	11		Red SSP	50		increasing	NL VU II
Hooded vulture		20.14.1	10	92.4	Red SSP	50		increasing	NL EN I
Secretary bird	June 5 2013	15.12	12	8	Red SSP	30	Need 18 spaces	Decreasing	NL VU II
African Pygmy Falcon	Dec. 2012	27.19.1	18	51	Red SSP	See RCP	Increase space	Stable	NL II

Common Name (*Genus species*)	Date of Last Breeding and Transfer Plan	Current Population Size (N)	Current Number of Participating Institutions	%GD at 100 years or 10 generations)	SSP Program Designation	5 year Target Population Size (N)	Space Needed (target population size - current space)	Recent 5 Year Population Trend (increasing, decreasing, or stable)	USFWS IUCN CITES
Verreaux's Eagle Owl		9.8.3		Unknown at this time	Red SSP				

Appendix V

Species Profiles

For each program the leaders have given a species profile that will assist partners in finding more information about the programs and who to contact if they have questions. These are also used to show current status of the programs as well as any conservation programs and finally the demographics and genetics of the population, The following information can be used to assess the population that is attached to the end of each species profile.

Demography & Genetics

Current population size (N):
This is the current number of specimens estimated to be living in participating institutions, according to the most current studbook, followed by the number of males, females, and unknown sex individuals in the population.

Target population size:
Population size designated in the previous RCP (or current RCP?? – review and update these values if they've changed)

Historic population growth rate ($\lambda = 1.0$, 0% growth)
This represents the annual rate of increase of the population, as determined by demographic analysis of historic studbook data within the date range of modern management, or comparison with a similar species. This value typically is extracted from PMx (or other population management software) and is calculated from the life tables in this program.

Projected population growth rate ($\lambda = 1.0$, 0% growth)
This represents the projected annual rate of increase of the population, and is typically extracted from the 20 year stochastic projections from PMx (or other population management

software) and are based on what the likely projection of the population is based on 5-year and historic lambdas as well as target population size.

Current Founders (N):
Number of individuals obtained from a source population (often the wild) that has have no known relationship to any individuals in the derived population (except for their own descendants).

GD Retained – Estimated current gene diversity of AZA population (%)
Gene diversity was calculated by genetic analysis of true or analytical studbook data. The proportional gene diversity (as a proportion of the source population) is the probability that two alleles from the same locus sampled at random from the population will not be identical by descent. Gene diversity is calculated from allele frequencies, and is the heterozygosity expected in progeny produced by random mating, and if the population were in Hardy-Weinberg equilibrium.

Mean Kinship (MK):
The mean kinship coefficient between an animal and all animals (including itself) in the living, captive-born population. The mean kinship of a population is equal to the proportional loss of gene diversity of the descendant (captive-born) population relative to the founders and is also the mean inbreeding coefficient of progeny produced by random mating. Mean kinship is also the reciprocal of two times the founder genome equivalents: MK = 1 / (2 * FGE). MK = 1 - GD.

Mean Inbreeding (F):
Probability that the two alleles at a genetic locus are identical by descent from an ancestor common to both parents. The mean inbreeding coefficient of a population will be the proportional decrease in observed heterozygosity relative to the expected heterozygosity of the founder population.

Gene Diversity at 100 Years from Present:
This calculation of gene diversity is derived from projections in PMx (or other population management software) which is calculated by examining current gene diversity retained, projected growth rate, ratio of Ne/N and target population size to determine the level of gene diversity that will be retained in 100 years (or for another specified timeframe).

The following table is an example of different projection strategies used for each population to evaluate whether the current population will be able to meet the standard AZA program goal of 90% gene diversity for at least 100 years.

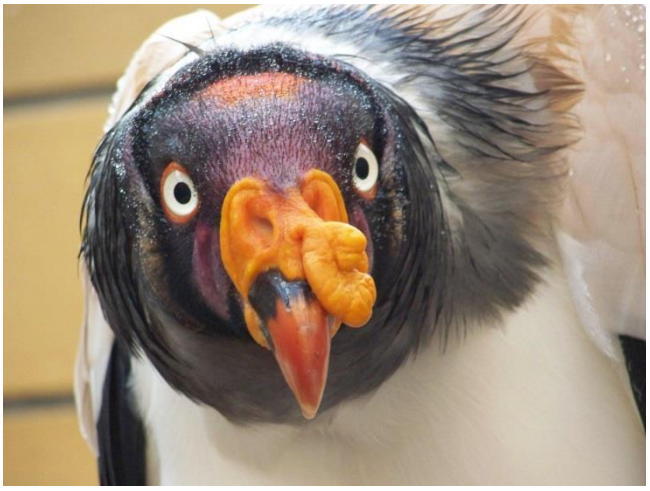
Projection strategy	% GD at 100 years	Years to 90% GD	Years to 10% GD loss	Tested target population size (after/before exclusions)
Strategy A evaluates the genetic status of the population in 100 years under current conditions (historic average annual growth rate, current GD, current Ne/N). This strategy assumes that no founders will be imported. The **tested target population size** *was the number set as the maximum allowable population size on the PM2000 Goals Screen, and was generally the estimated current maximum holding capacity from the TAG's space survey.*				
A. Increase lambda or Ne/N B. Increase target population size tested				
Additional strategies evaluate the genetic status of the population in 100 years with an improvement to population parameters (average annual growth rate, Ne/N) or an increase in the tested target size (set to either the estimated future holding capacity from the TAG's space survey or some larger population size).				
C. Import reasonable # founders				
Other additional strategies evaluate the genetic status of the population based on previous improvements with the addition of a realistic number of founders, based on meeting attendees' expertise, with imports scheduled as described.				

The Raptor TAG would like thank Gina Ferrie, AZA PMC Adjunct Population Biologist in her assistance in compiling and developing the Demographics and Genetic sections for our program species. Her assistance is greatly appreciated.

Green SSP

King Vulture

Species: *King Vulture (Sarcoramphus papa)*



Current Population:

- **AZA:** 55.60.19 (134)
- **2014 Space Survey**
- **2015 Studbook Update**

Wild Population Status:

- **CITES:** III (Honduras)
- **IUCN:** Least Concern

Program Leader: Shelly Collinsworth

Studbook Keeper: Shelly Collinsworth

Other Regional Program Status:

This species is also held in EAZA institutions and the status is similar to the North American population.

Description:

King vultures are curious and intelligent birds with bright facial coloration that makes them an attractive exhibit bird. They have been successfully integrated into a variety of enclosures both with other species and alone. Consideration must be given to the fact that their feet are supremely sensitive to cold weather and, if held in areas with temperature extremes, these birds will require heated holding.

Program Goals/Objectives:

Goal #1 - On going maintenance of genetic and demographic health of the long term population.

Goal #2 - Planned re-integration of imprinted program animals into breeding situations once they reach 4 to 5 years of age and become too aggressive to handle. The intent is to reduce the number of single birds who are no longer in use as program animals due to aggression, and reintigrate them into the breeding population.

Goal #3 - Investigate mixing and exchanging genetic stock with EAZA bloodlines before the next planning session.

Conservation Projects/Connections:

- No conservation programs in place at this time. The population is stable in most regions.

Demographics and Genetics

Current Population Size (N)	89
Males	40
Females	42
Unknown	7
Target Population Size	120
Historic Population Growth Rate	1.018
Projected Population Growth Rate	1.03
Current Founders	43
Gene Diversity (GD) Retained (%)	97.35
Population Mean Kinship (MK)	0.0265
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present (%)	90.5

Photo Credit: Helen Dishaw, Tracy Aviary

Yellow SSP

Burrowing Owl

Species: Burrowing Owl; *Athene cunicularia*

Current Population:

- **AZA: 63.62.12 (145); 47 institutions**
- **Non-AZA: 4.4 (8); 3 institutions**
- **2014 Space Survey**

Wild Population Status

- **CITES: Appendix II**
- **IUCN: Least Concern**
- **FWS: No Listing**
- **COSEWIC: Endangered**

Program Leader: Yvonne Strode/Peoria Zoo

Studbook Keeper: Yvonne Strode/Peoria Zoo

Other Regional Program Status:

Description: The burrowing owl is a small ground-dwelling owl; length varies from 19.0 to 25 cm and the average weight is 150 g. The head is round and lacks ear tufts. The facial disc, which is poorly developed, is framed by a broad, buffy-white stripe on the interior part from the eyebrow to the cheek. This stripe is fully exposed when the owl is in the white and tall posture seen during territorial disputes and copulatory behaviors. The characteristic long legs are lightly feathered with short, fine plumage. The toes, which are not especially powerful in gripping, are almost bare with small, very bristly feathers. In flight, the burrowing owl is highly maneuverable.

Program Goals/Objectives:

Goal #1 - Increase genetic diversity; make recommendations annually – full PMP every 3 years, use MateRx other 2 years. Research history of past non-releasable birds successfully breeding, i.e., do any specific injuries prevent copulation? Encourage participating institutions to acquire non-releasable wild caught bird whenever possible – if not possible, contact SSP coordinator (goal of at least 2 new founders annually).

Goal #2 - Maintain non-breeding population for use as program animals. Survey all current and potential program participants to quantify need and stress importance of not using genetically valuable birds for education (in conjunction with annual needs/wants survey). If

necessary, breed pairs with lower MK values for education. Disseminate information to increase value of using species as program animals (add section to 2015 studbook)

Goal #3 - Increase participation of AZA institutions in current/future release programs. Survey current holding institutions on interest/available resources (in conjunction with 2015 needs/wants survey in Aug/Sept). Work with institutions and rehabilitators in northern states of range to recruit wild caught birds.

Conservation Projects/Connections:

Have been in contact with Alexandra Froese of the Manitoba Release Program and there is interest in working with AZA facilities. At this time, there are no birds in the population whose founder ancestors originated in the states required, i.e., South Dakota, North Dakota, Colorado, Nebraska, Wyoming).

Demographic and Genetics:

Current Population Size (N)	123
Males	57
Females	59
Unknown	7
Target Population Size	150
Historic Population Growth Rate	1.033
Projected Population Growth Rate	1.015
Current Founders	24
Gene Diversity (GD) Retained (%)	93.64
Population Mean Kinship (MK)	0.0636
Mean Inbreeding (F)	0.07
Gene Diversity at 100 Years From Present (%)	57.3

Yellow SSP

Snowy Owl

Species: *Snowy Owl*
(Bubo scandiacus)

Current Population:

- **AZA: 35.35.5 (75)**
- **2013 Studbook**

Wild Population Status

- **CITES** = Appendix II
- **IUCN** = Least Concern
- **FWS** = Least Concern

Program Leader: Cody Hickman
Studbook Keeper: Cody Hickman

Other Regional Program Status:
This species is held in EAZA were the population currently at 164.176. 7.

Description:
This species is circumpolar which includes Russia, Canada, Greenland, Iceland, Northern Europe, and Alaska. This species is dimorphic with females white with extensive barring on the wings, chest, stomach, legs, and tail feathers. The males when reached sexual maturity are nearly completely white except for black bars on the primary and tail feathers

Program Goals/Objectives:

Goal #1 - Recruit participants to research the effects of altered photoperiod on breeding success in snowy owls. In the hopes that snowy owls will breed earlier in the season.

Goal #2 – Build relationships with rehab facilities to bring in new founder stock that has been deemed unable to be released back into the wild.

Goal #3 – Increase the number of participating institutions by at least two facilities by December 2016.

Conservation Projects/Connections:

- No conservation programs in place.

Demography and Genetics:

Current Population Size (N)	62
Males	29
Females	30
Unknown	3
Target Population Size	150
Historic Population Growth Rate	0.995
Projected Population Growth Rate	1
Current Founders	37
Gene Diversity (GD) Retained (%)	95.48
Population Mean Kinship (MK)	0.0452
Mean Inbreeding (F)	0.0229
Gene Diversity at 100 Years From Present (%)	17.6

Photo Credit: Steve Dombroskie, Maryland Zoo

Yellow SSP

Ruppell's Vulture

Species: Ruppell's Vulture (Gyps rueppelli)

Current Population:
27.28.2 at 14 AZA zoos and 0.2 at non accredited facilities.

Wild Population Status

- **CITES: II**
- **IUCN: Endangered**
- **FWS**

Program Leader: Bryan Emberton

Studbook Keeper: Bryan Emberton

Other Regional Program Status: Species is held in EAZA. Current EAZA studbook is being developed/updated and the holder is in contact with the Population Manager.

Description: Both genders look alike: mottled brown or black overall with a whitish-brown underbelly and thin, dirty-white fluff covering the head and neck. The base of the neck has a white collar; the eye is yellow or amber.

Program Goals/Objectives:
Maintain genetic and demographic health. This population will need to add founders to the population.

Goal #1 - Increase participating facilities by 3 over the next year and 5 within 5 years. This will allow for an increased number of holding spaces. The TAG has the target population set at 75 birds. Bringing more facilities on line will allow for this goal to be achieved.

Goal #2 - Organize and share best practices for exhibit design and breeding set up. Program leader will do this by maintaining direct communication via email and phone calls. This will allow facilities that have not yet been successful breeding to bring together resources and become successful breeding institutions.

Goal #3 - Increase communication. Program leader will reach out quarterly to each institution to see if they need any information or assistance. This will facilitate better relationships and allow for faster responses to needs that arise.

Conservation Projects/Connections:
The species faces similar threats to other African vultures, being susceptible to habitat conversion to agro-pastoral systems, loss of wild ungulates leading to a reduced availability of carrion, hunting for trade, persecution and poisoning. Legal protection of this species in its home ranges will need to be put in place to slow and eventually reverse the steady decline of the population.

Demography and Genetics:

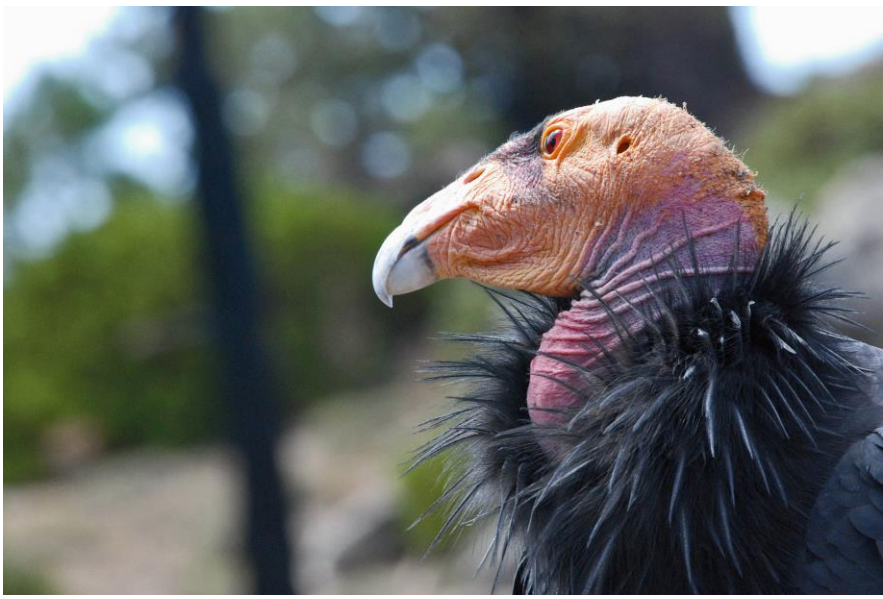
Current Population Size (N)	59
Males	27
Females	30
Unknown	2
Target Population Size	75
Historic Population Growth Rate	1.039
Projected Population Growth Rate	1.031
Current Founders	15
Gene Diversity (GD) Retained (%)	87.91
Population Mean Kinship (MK)	0.1209
Mean Inbreeding (F)	0.0168
Gene Diversity at 100 Years From Present (%)	76.5

Photo Credit: Ian Shelley, National Zoo

Yellow SSP

California Condor

Species: California Condor
(gymnogyps californianus



Current Population: 424

- **AZA:**
- **2014 Space Survey Zoo**
- **Current Population – both captive and released - 424**
- **Captive population 201 at 7 institutions with 2 holding for education and 5 for reproduction. `**

Wild Population Status: Endangered

- **CITES I**
- **IUCN Critically Endangered**
- **FWS Endangered**

Program Leader: Mike Wallace

Studbook Keeper: Michael Mace

Description:

Black plumage, with white underwing-coverts. Long ruff feathers also black. Head and neck bare with variable pink orange and red colours. Immature has bare skin grey. Largest obligate avian scavenger in US; highly social K-selected species.

Wingspan: 3 m

Wt. 8-10 K

Program Goals/Objectives:

Primary Goal - Considering genetic, demographic and behavioral factors build 3 disjunct populations (2 in the wild within the species former range and one in captivity). Each population should number at least 150 birds. And each population should be self-sustaining nutritionally and reproductively with acceptable survivorship.

Conservation Projects/Connections:

Since the capture of the entire population of 27 birds in 1987 the species has reproduced well in zoo facilities. Husbandry techniques are still being refined. First released by USFWS at Hopper Mt National Wildlife refuge in Ventura Co. California, they have now been released in 5 areas within their former range including Baja California Mexico. Except for the historical mortality factor of lead poisoning the birds are doing exceptionally well. Condors are highly susceptible to lead ingestion from wild game killed by hunters using lead ammunition. The resulting lead toxicity is the most salient risk to condors and without mitigation of the problem their recovery is in doubt. Non-lead alternatives now exist with nearly equivalent cost and ballistics. Both education and legislation are being employed to influence behavioral change in hunters with highly variable results. Change takes time.

Demographics and Genetics

California Condor (captive population)

Current Population Size (N)	100
Males	48
Females	50
Unknown	2
Target Population Size	150
Historic Population Growth Rate	~1.12
Projected Population Growth Rate	
Current Founders	17
Gene Diversity (GD) Retained (%)	91.56
Population Mean Kinship (MK)	0.0944
Mean Inbreeding (F)	0.0393
Gene Diversity at 100 Years From Present (%)	

Photo Credit: Ken Bohn – San Diego Zoo Safari Park

Yellow SSP
Andean Condor

Species: Andean condor (*Vultur gryphus*)

Current Population:

- **AZA:**
- **2014 Space Survey**

Wild Population:

- **CITIES I,** since 1975
- **IUCN –** NT
- **FWS -** Endangered

Program Leader: Michael Mace
Studbook Keeper: Ron Webb

Other Regional Program Status:

Description:

Male has comb/caruncle, large neck wattle, and yellow eyes.
Female lacks comb/wattle, and has red eyes.
Caruncle, plumage, etc. used in courtship display.
Plumage black with grayish white secondary feathers and coverts.
White neck ruffle only appears in adults.
Bare skin on head.
Juvenile is brown with dark bare skin – develops adult plumage after 5-8 years.
Adult male 24-33 lb; adult female 17-24 lb.
Wingspan up to 126 in (10.5 ft) – largest flying bird in South America.
Body length 39-51 in (3.25 -4.25 ft).
Lives up to 70 years in zoos, 50-60 years in wild.

Program Goals/Objectives:
Goal #1 - In 2012, the SSP began working with Asociacion Colobiana De Parques Zoologicos Y Arcuarios (ACOPAZOA) to assist them in establishing Andean condors in Colombian zoos that, in the future, would produce offspring for release into the wild.

Goal #2 - In the future, in collaboration with Houston Zoo and Weltvogelpark Walsrode, SSP members will be providing training to key zoo staff on incubation techniques.

Goal #3 - Support and expand the educational outreach programs that have been established, they are Project Wild and Windows on the Wild.

Conservation Projects/Connection:
As stated in the goals; there is work in Columbia to continue developing and increase the current release program.

Demographics and Genetics:

Andean Condor

Current Population Size (N)	71
Males	31
Females	39
Unknown	1
Target Population Size	85
Historic Population Growth Rate	1.03
Projected Population Growth Rate	1.03
Current Founders	36
Gene Diversity (GD) Retained (%)	97.62
Population Mean Kinship (MK)	0.0238
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present (%)	84

Red SSP
Cape Vulture

Species: Cape vulture (Cape griffon vulture)
Gyps coprotheres

Current Population:
AZA: 16.15.0
Wild Population Status
- **IUCN** = vulnerable
- **USFWS** = not listed
- **CITES** = Appendix II

Program Leader:
Susie Kasielke, Los Angeles Zoo
Studbook Keeper:
Susie Kasielke, Los Angeles Zoo

Other Regional Program Status: none known

Description:
Adults are cream to white with dark brown flight feathers and spots on greater wing coverts, gold eyes and blue coracoid patches. Juveniles have light brown, scaled coverts with dark brown flight feathers, brown eyes and red coracoid patches. Weights of wild birds are 7.07-10.90 kg, with wingspans of approximately 2.40 m, females being slightly larger than males.
Found in varied habitats, including open grasslands, savannas and steppes in proximity to mountains, Cape vultures forage exclusively on carrion as part of an avian scavenging guild that includes other vulture species, storks, eagles, kites, corvids and others. The species breeds in colonies of up to 1000 pairs, with stick nests built in cliff ledges as little as 2-3 m apart. Both parents incubate the single egg for 54-56 days and care for the chick. Although the chick fledges at 125-170 days, parents continue caring for it into the following year as the juvenile develops foraging skills.
In 2006-2007, the total population was estimated to be 8,000-10,000 individuals, with 80% of the birds living in 18 core colonies. The overall population decreased by about 10% from 1992-1999 and declined by 60-70% in Eastern South Africa from 1992-2007. The species had been extirpated in Namibia until recent releases of wild birds from South Africa that were injured and rehabilitated, then translocated to their historic range. The current rate of decline is unclear, but Cape vultures are facing the same threats as other African vultures.
In addition to habitat loss to farming and ranching and significant reductions in

populations of large mammals on which the birds feed, vultures are increasingly subjected to poisoning, both unintentional from carcasses dosed by landowners to destroy mammal scavengers, and intentional from elephant and rhino carcasses laced with agricultural pesticides by poachers to avoid detection of their activities. In South Africa, the use of vulture parts for traditional medicine and cultural practices intended to bring good luck is widespread. Cape vultures have frequently been lost to drowning in reservoirs and large livestock waterers. As with large birds all over the world, collision with power lines is a significant cause of mortality. An additional threat may be posed by the use of the drug Diclofenac, which is used in veterinary medicine to treat livestock but is highly toxic to vultures and has therefore resulted in the near-extinction of 3 species of vultures in India and neighboring countries.

Program Goals/Objectives:

• In order to ensure the AZA population is self-sustaining, and to potentially assist with recovery of the species in the wild, this program must develop and implement reliable breeding husbandry practices.
• Additional AZA institutions will be recruited to provide dedicated breeding spaces as well as holding for additional Cape vultures.
• In order to maintain genetic and demographic health in the long term, new founders may need to be added to the population over time. Wild birds that have been injured and rehabilitated but deemed non-releasable may be available.
• The vulture SSPs and Raptor TAG will seek opportunities to initiate and enhance conservation efforts for Africa's vultures.

Conservation Projects/Connections:

• The Vulture Conservation Foundation (VCF), based in Spain, organized the first International Workshop on African Vultures and Poison in Málaga, Spain 8-11 April 2014. Complete proceedings of this workshop are available free online at: http://www.4vultures.org/our-work/anti-poisoning/international-workshopafrican-vultures-poisoning/
• The Rare and Endangered Species Trust, a non-profit organization in Namibia, provides clean carcasses in 2 vulture restaurants, monitors wild populations, provides local education, raises public awareness about vultures and their conservation, and, in collaboration with the deWildt Cheetah and Wildlife Trust, has released rehabilitated Cape vultures from South Africa into historic habitat in Namibia.
• VulPro, a private, non-profit group in South Africa, operates a rehabilitation facility, maintains breeding facilities for non-releasable Cape vultures, monitors wild populations, provides local education and raises public awareness about vultures and their conservation.

Demographics and Genetics:

Cape Griffon Vulture

Current Population Size (N)	26
Males	12
Females	13
Unknown	1
Target Population Size	50
Historic Population Growth Rate	1.031
Projected Population Growth Rate	1.031
Current Founders	3
Gene Diversity (GD) Retained (%)	76.04
Population Mean Kinship (MK)	0.2396
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present (%)	53

Photo Credit: Olis Garber, St. Augustine Alligator Faem

Red SSP

White-backed Vulture

Species: white-backed vulture (African white-backed vulture), *Gyps africanus*

Current Population:

- **AZA:** 7.8.0

Wild Population Status

- **IUCN** = endangered
- **USFWS** = not listed
- **CITES** = Appendix II

Program Leader:
Susie Kasielke, Los Angeles Zoo
Studbook Keeper:
Susie Kasielke, Los Angeles Zoo

Other Regional Program Status:
none known

Description:
Adults are dark brown with white lower back, underwing coverts and ruff, dark eyes and bare, dark head. Weights of wild birds are 4.15-7.20 kg, with wingspans of approximately 2.18 m, females being larger than males.
Found in varied habitats, including woodlands, savannas and steppes, white-backed vultures forage exclusively on carrion as part of an avian scavenging guild that includes other vulture species, storks, eagles, kites, corvids and others. Breeding may be loosely colonial, with stick nests built in the crowns of trees. Both parents incubate the single egg for 56-58 days and care for the chick. Although the chick fledges at 120-130 days, parents continue caring for it into the following year as the juvenile develops foraging skills.
Although the wild population is estimated at 270,000 birds, the white-backed vulture is now listed as endangered by IUCN due to the rapid decline in the population across its extensive range in central and southern Africa. Over an estimated 3 generations, or 55 years, the population has decreased by more than 50% overall and more than 90% in West Africa due to multiple serious threats.
In addition to habitat loss to farming and ranching and significant reductions in populations of large mammals on which the birds feed, vultures are increasingly subjected to poisoning, both unintentional from carcasses dosed by landowners to destroy mammal

scavengers, and intentional from elephant and rhino carcasses laced with agricultural pesticides by poachers to avoid detection of their activities. In West Africa, the use of vulture parts for traditional medicine and cultural practices intended to bring good luck is widespread and has become commercialized. As with large birds all over the world, collision with power lines is a significant cause of mortality. An additional threat may be posed by the use of the drug Diclofenac, which is used in veterinary medicine to treat livestock but is highly toxic to vultures and has therefore resulted in the near-extinction of 3 species of vultures in India and neighboring countries.

Program Goals/Objectives:

• In order to ensure the AZA population is self-sustaining, and to potentially assist with recovery of the species in the wild, this program must develop and implement reliable breeding husbandry practices.
• Additional AZA institutions will be recruited to provide dedicated breeding spaces as well as holding for additional white-backed vultures.
• In order to maintain genetic and demographic health in the long term, new founders may need to be added to the population over time. Wild birds that have been injured and rehabilitated but deemed non-releasable may be available.
• The vulture SSPs and Raptor TAG will seek opportunities to initiate and enhance conservation efforts for Africa's vultures.

Conservation Projects/Connections:

• The Vulture Conservation Foundation (VCF), based in Spain, organized the first International Workshop on African Vultures and Poison in Málaga, Spain 8-11 April 2014. Complete proceedings of this workshop are available free online at: http://www.4vultures.org/our-work/anti-poisoning/international-workshopafrican-vultures-poisoning/
• VulPro, a private, non-profit group, operates a rehabilitation facility, monitors wild populations, provides local education and raises public awareness about vultures and their conservation.
• BirdLife Botswana and other in-country NGOs also provide local education and raise public awareness about vultures and their conservation.

Demographics and Genetics:

AWB Vulture

Current Population Size (N)	20
Males	13
Females	7
Unknown	0
Target Population Size	50
Historic Population Growth Rate	
Projected Population Growth Rate	1.03
Current Founders	4
Gene Diversity (GD) Retained (%)	75
Population Mean Kinship (MK)	0.25
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present (%)	46

Photo Credit: Ed Diebold, Riverbanks Zoo

Yellow SSP

Spectacled Owl

Species: *Spectacled Owl (Pulsatrix perspicillata)*

Current Population:

- **AZA: 37.32.15 (84)**
- **2014 Space Survey**

Wild Population Status

- **CITES** = Appendix II
- **IUCN** = Least Concern
- **FWS** = n/a

Program Leader: Steven Sarro
Studbook Keeper: Steven Sarro

Other Regional Program Status:
This species is also held in EAZA institutions and the status is similar to the North American population.

Description:
This large owl is native to Central and South America. The back and head is a rich dark brown while the under belly and breast is buffy and lightly barred in some subspecies. The eyes are bordered by white markings giving them their name. Generally, they will lay one or two eggs during breeding events.

Program Goals/Objectives:
Goal #1 - Explore importing 4 – 6 spectacled owls from Trinidad into our managed population to increase genetic diversity. Hopeful import by end of 2016.

Goal #2 - Monitor the outreach program owls and encourage swapping of genetically valuable animals into breeding situations as needed.

Goal #3 - Appoint a new co-coordinator for the SSP to "train the next generation" to be in place by the end of 2015

Conservation Projects/Connections:

- No conservation programs in place at this time. The population is stable in most regions.

Demographics and Genetics

Current Population Size (N)	73
Males	35
Females	34
Unknown	4
Target Population Size	85
Historic Population Growth Rate	1.07
Projected Population Growth Rate	1.01
Current Founders	13
Gene Diversity (GD) Retained (%)	90.71
Population Mean Kinship (MK)	0.0929
Mean Inbreeding (F)	0.0265
Gene Diversity at 100 Years From Present (%)	72.31

Yellow SSP

Eurasian Eagle Owl

Species: *Eurasian Eagle Owl (Bubo bubo)*

Current Population:

- **AZA: 61.52.00 (113)**
- **2014 Space Survey**:

Wild Population Status

- **CITES =** Appendix II
- **IUCN =** Least Concern
- **FWS =** n/a

Program Leader: R. Harrison Edell
Studbook Keeper: R. Harrison Edell

Other Regional Program Status:
This species is held in zoos in every region, but captive populations are not managed outside of North America.

Description:
The Eurasian Eagle Owl (also known as the Great, or Northern Eagle Owl) has a significant range which includes most of Europe and Scandinavia, western Asia, and eastern Asia (north of the Himalayas). Overall, 14 subspecies of Eurasian Eagle Owl are recognized. Weighing between 1.5 and 4.2 Kg, with a wingspan of up to 1.88 m, this is among the world's largest owls, inhabiting woodland, open forest, taiga, and steppe. It has been suggested that both habitat selection and nesting success rates depend primarily on the availability of specific suitable prey species. Highly adaptable, eagle owls may be active either at night or in the day, hunting a variety of prey from the air or an open perch. The majority of the diet consists of small mammals, but may include larger mammals, birds up to the size of herons (*Ardea*) or buzzards (*Buteo*), and reptiles. Breeding as early as two years of age, these owls tend to be monogamous, using the same nesting site year after year; eagle owls have been known to nest on cliffs, in nests built by other birds, or on the ground. As many as four eggs (but more often two) are laid, with a three-day laying interval, and incubated (almost exclusively by the female) for 34-36 days.

The first recorded appearance of Eurasian Eagle Owls in North American zoological collections occurred in December 1959, with the importation of 01.00.01 Danish birds to the San Diego Zoo. The first successful North American captive hatch occurred at Calgary Zoo in July 1970.

While various subspecies (including *Bubo bubo bubo*, *B. b. turcomanus*, *B. b. hispanus*) have been maintained historically, AZA's Raptor TAG manages the species only at the specific level.

Program Goals/Objectives:
Goal #1 – Brainstorm potential pitfalls in reproductive management, conducting comprehensive survey of AZA institutions that hold pairs of owls. Despite a high number of recommended breeding pairs, only two AZA institutions (Oklahoma City Zoo, National Aviary) have successfully bred Eurasian Eagle Owls since 1994, producing 16 owlets (from two hens). While this species' husbandry is not challenging, reproductive success is consistently low among AZA collections.

Goal #2 - Monitor outreach program owls, encouraging additional facilities to allow program birds the opportunity to breed during "off season," following National Aviary's management model. Work with AZA's Ambassador Animal Scientific Advisory Group to further strengthen connections (and communication) between outreach animal management and population management communities.

Goal #3 - Expand SSP Steering Committee to involve additional participants; mentor the "next generation" of Program Leaders as part of EEO SSP succession plan.

Conservation Projects/Connections:

- No conservation programs in place at this time. The population is stable in most regions.

Demographics and Genetics

Current Population Size (N)	113
Males	61
Females	52
Unknown	0
Target Population Size	70 / 135
Historic Population Growth Rate	
Projected Population Growth Rate	1.044
Current Founders	22
Gene Diversity (GD) Retained (%)	95.1
Population Mean Kinship (MK)	0.0485
Mean Inbreeding (F)	0.0368
Gene Diversity at 100 Years From Present (%)	73.1

Red SSP
Secretary Bird

Species: Secretary Bird (*Sagittarius serpentarius*)

Current Population:

- **AZA - 30**
- **2014 Space Survey - 11.9**
- **Last published studbook (2012) 22.20**

Wild Population

- **CITES - II**
- **IUCN - VU**
- **FWS**

Program Manager: Michelle J P Handrus

Other Regional Program Status:

- **EAZA – 30.21.1 in 18 institutions**

Description:
Size: 125–150 cm
Weight: 2300–4270 g
Wingspan: 191–215 cm.
Unmistakable, terrestrial raptor, with long pink legs, long black crest feathers, bare orange face, hooked aquiline bill and long central tail feathers. Grey above, white below with black flight feathers, abdomen and thighs. Female is probably slightly smaller and less bluish than male.
Juvenile is similar to adult, but has shorter tail and crest, with grey barring on white underwing-coverts and undertail-coverts; also paler face; brown edges to grey dorsal feathers, especially in juvenile female. Eye changes from grey to brown and bill from black to blue-grey when adult.

Program Goals/Objectives:
Goal #1 – As a new program manager the first order is to attend studbook school and do an updated studbook and population analysis.

Goal #2 – Evaluate and assess the current holding/exhibit conditions of Secretary birds and discuss breeding strategies to help increase breeding success.

Goal #3 – Long term goal is to produce a husbandry manual but will follow the direction of the TAG as to when that needs to be done.

Conservation Projects/Connections:
No current programs in place at this time.

Demographics and Genetics

Current Population Size (N)	35
Males	20
Females	15
Unknown	0
Target Population Size	35
Historic Population Growth Rate	1.11
Projected Population Growth Rate	
Current Founders	5
Gene Diversity (GD) Retained (%)	83.73
Population Mean Kinship (MK)	0.1627
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present (%)	8

References: Handbook of Birds of the World Volume 2

RED SSP

African Pygmy Falcon

Species: African Pygmy Falcon *(Polihierax semitorquatus)*

Current Population:

- **AZA:** 27.20.1 (48)
- **2014 Space Survey**

Wild Population Status:

- **CITES** Appendix II
- **IUCN** Least concern
- **FWS** N/A

Program Leader: Nicole LaGreco

Studbook Keeper: Nicole LaGreco

Other Regional Program Status: There are no programs in other regions, and less than 12 are housed in facilities outside of North America based on ZIMS data.

Description:

Adult pygmy falcons are white below and on the face, grey above. Females have a rust colored back. There are white spots on the nape. Juveniles have a brown back, similar to adult females but duller in color. The flight feathers of the wings are spotted black and white (more black above, more white below); the tail is barred black and white. They are found in eastern and southern Africa and they are the smallest raptor on the continent. As a small falcon, only 19 to 20 cm long, it preys on insects, small reptiles, and small mammals.

Program Goals/Objectives:

Goal #1 - Import birds from private collection, currently held at EAZA facility, to increase GD.

Goal #2 - Increase parent rearing success--work with current facilities that are successful to develop protocol.

Goal #3 - Increase the number of holding facilities.

Conservation Projects/Connections:

No current programs in place at this time.

Demographics and Genetics

Current Population Size (N)	47
Males	26
Females	21
Unknown	0
Target Population Size	70
Historic Population Growth Rate	1.08
Projected Population Growth Rate	1.06
Current Founders	7
Gene Diversity (GD) Retained (%)	77.26
Population Mean Kinship (MK)	0.2274
Mean Inbreeding (F)	0.1599
Gene Diversity at 100 Years From Present (%)	51

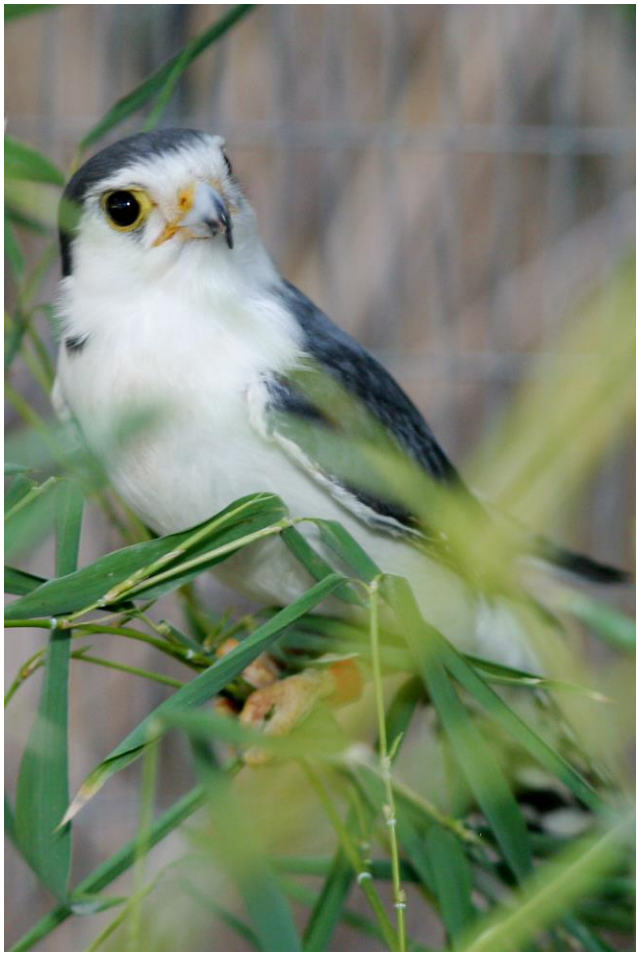


Photo Credit: Cathy Burkey, Dallas Zoo

RED SSP

Lappet-faced Vulture

Species: Lappet-faced vulture (*Torgos tracheliotus*)

Current Population:

- AZA: 14.14.0
- Space Survey: 27

Wild Population Status

- **CITES:** Appendix II
- **IUCN:** Vulnerable
- **USFWS:** N/A

Program Leader: Debbie Milligan

Studbook Keeper: Debbie Milligan

Other Regional Programs: N/A

Description:

Weight: 115 cm; 5400–9400 g, mean 6780 g;
Wingspan: 280 cm.
Color of head and exposure of lappets partly dependent on mood and temperature; white down on adult's patagia and thighs forms distinctive flight pattern. Juvenile is brown with some down on head, dark horn-colored bill and no pale areas on underparts. Races differ in extent of lappets and bald head, and in color of bill and thighs, but considerable individual variation (may be clinal); negevensis has patagia buff-colored.
They are large vultures and are impressive to see up close. Their size and character make them a popular species with institutions that have worked with them.
They are also nicknamed the “king vulture” in Africa as they are capable of opening up any carcass with their large strong beak – other vultures will step to the side so that a Lappet may open the carcass for all to share.

Program Goals/Objectives:
Goal #1: Increase the number of zoos producing eggs/chicks. Contact participating facilities about existing breeding set up and offer suggestions. Give suggestions before October 31.

Goal #2: Do a new MateRx for the population and pair birds up to increase the chance of breeding. Have this completed before June 30 so potential moves could be made before breeding season.

Goal#3: Add one new zoo holding this species, preferrably an instiiution with previous large African vulture experience. Contact previous institutions that have worked with these species to get interests. Do this by July 31, after the MateRx has been completed.

Conservation Projects/Connections:
There are a few survey studies currently being done with Lappets – Endangered Wildlife Trust is doing a study including them in South Africa.

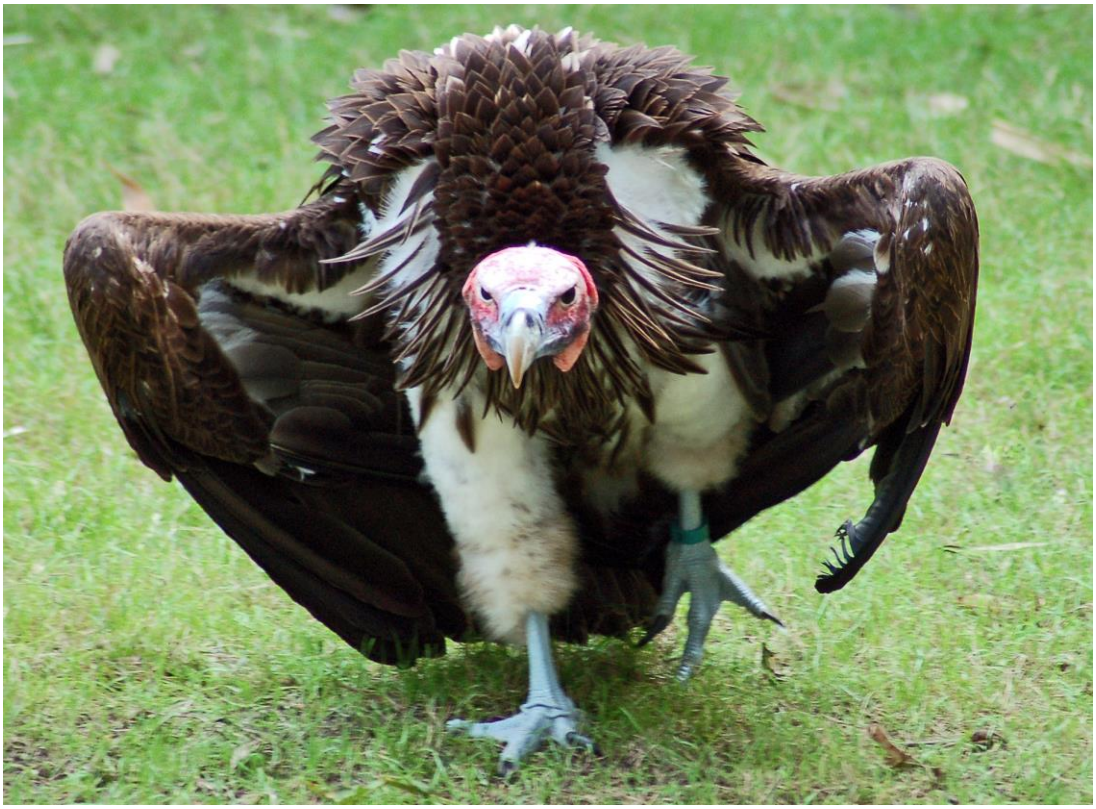
Sahara Conservation Fund is supporting nest studies of Lappets in Niger evaluating nest activity and population trends.

Demographics and Genetics:

Table was not able to be completed by PMC Adjutant.

References:

Kemp, A.C. & Christie, D.A. (2013). Lappet-faced Vulture (Torgos tracheliotos). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. & de Juana, E. (eds.) (2013). Handbook of the Birds of the World Alive



YELLOW SSP

Eurasian Black Vulture

Species: Eurasian Black vulture (*Aegypius monachus)*

Current Population:

- **AZA: 24.29.1** (in 23 facilities)

Wild Population Status

- **CITES: Appendix II**
- **IUCN: Near Threatened**
- **FWS:** not applicable

Program Leader: Mary Jo Willis Denver Zoo

Description:

One of largest Old World vultures with bare skin of head and neck bluish-grey; head covered with blackish down; neck ruff paler on older birds. Immature is somewhat blacker, and top of head covered with black down; juvenile has bare skin pink. Males can weigh from 7 – 11.5 kg and females from 7.5 – 12.5 kg. Wingspan is 250-295 cm.

Program Goals/Objectives:

Conservation Projects/Connections:

Eurasian Black Vulture Program – monitoring wild population and studying the population growth in Mongolia, through the Denver Zoo.

Work to expand the population with the import of non-releaseable birds from South Korea; Denver Zoo coordinating along with SSP manager.

Demographics and Genetics:

Current Population Size (N)	54
Males	24
Females	29
Unknown	1
Target Population Size	70
Historic Population Growth Rate	1.011
Projected Population Growth Rate	1.011
Current Founders	14
Gene Diversity (GD) Retained (%)	93.05
Population Mean Kinship (MK)	0.0695
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present (%)	79.32

CANDIDATE SPECIES

Steller's Sea Eagle

Species: Steller's Sea Eagle (*Haliaeetus pelagicus*)

Current Population:

- **AZA:** 12.11.1

Wild Population Status

- **CITES:** Appendix II
- **IUCN:** Vulnerable
- **FWS:** N/A

Program Leader: Beau Parks

Studbook Keeper: Beau Parks

Other Regional Program Status:

European Studbook held by Lubov Kurilovich at Moscow Zoo (established 1995)

Description:

Adult Steller's Sea Eagles are dark brown overall with white forehead, shoulders, thighs and tail and heavy, yellow feet and beak. The tail is strongly wedge-shaped. Plumage is identical between sexes. A dark morph lacks all white patches except for the tail. Juvenile Steller's Sea Eagles are brown with light streaking throughout and progresses through four or five intermediate plumages before attaining adult coloration.

One of the largest eagles in the World, the larger females weigh between 6.2 and 9.5 kilograms with an average length of one meter and a wingspan of up to 2.5 meters. Males weigh between 4.9 and 6.8 kilograms with an average length of 0.89 meters.

Program Goals/Objectives:

Goal #1 - Make contact with institutional reps and collect taxon reports from all holder institutions. Program leader will become more familiar contact personnel, exhibit specifications and husbandry procedures at those institutions.

Goal #2 - Identify and recruit new holder institutions.

- Compile lists of institutions sorted by interest (high/medium) and SSE readiness (ready now/near future/maybe someday).
- Identify three (3) institutions with high interest who are ready to receive birds.

- Give special consideration to available off-exhibit holding space.

Goal #3 - Publish studbook by 12/31/15. Population has not been processed with PMC and will be done once the studbook is published.

Conservation Projects/Connections:

The Institute for Wildlife Studies (a non-profit conservation working group) has been studying Steller's Sea Eagles in their breeding range on the east coast of Russia and their wintering grounds in Japan since 1993.

Demographics and Genetics:

This population has not been evaluated by PMC and will be done once the studbook is published.

Sources:

Ferguson-Lees, J. and D.A. Christie. 2001. Raptors of the world. Houghton Mifflin, Boston, MA.

Meyburg, B.U. 1994. Steller's Sea-eagle. P. 123 *in* del Hoyo, J., A. Elliott, and J. Sargatal (eds). Handbook of birds of the world. Vol. 2. New World vultures to guineafowl. Lynx Edicions, Barcelona, Spain.

http://www.birdlife.org/datazone/speciesfactsheet.php?id=3366

http://www.iws.org/species_sea_eagle.html

http://en.wikipedia.org/wiki/Steller%27s_sea_eagle

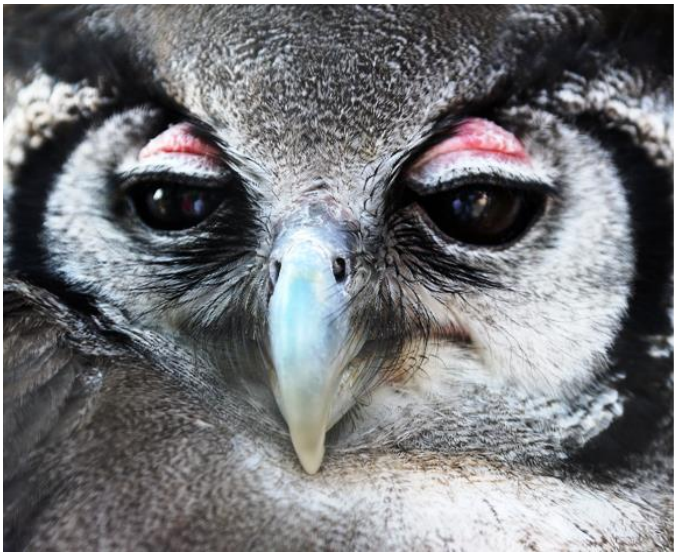
https://www.flickr.com/photos/41672617@N04/6989517701

http://globalraptors.org/grin/SpeciesResults.asp?specID=8273

Red SSP

Verreaux's Eagle Owl

Species: *Verreaux's Eagle Owl (Bubo lacteus)*



Current Population:

- **AZA: 09.08.03 (20)**
- **2014 Space Survey**

Wild Population Status

- **CITES =** Appendix II
- **IUCN =** Least Concern
- **FWS =** n/a

Program Leader: R. Harrison Edell
Studbook Keeper: R. Harrison Edell

Other Regional Program Status:
This species is held in zoos in Europe and South Africa, but captive populations are not managed outside of North America.

Description:
Verreaux's Eagle Owl inhabits open thorny savanna, riparian woodland, savannahs and semi-desert within a patchy range that includes parts of central Africa as well as the majority of eastern and southern Africa. Weighing between 1.6 and 3.1 Kg, with a wingspan of up to 140 cm, Verreaux's Eagle Owl is Africa's largest owl species. Highly adaptable, they tend to be crepuscular or nocturnal, hunting a huge variety of prey from the air or an open perch. Diet consists of mammals, birds up to the size of herons (*Ardea*), raptors or secretary birds (*Sagittarius*), reptiles, and even insects (which may be caught on the wing).

Breeding at the age of three to four years, these owls tend to be monogamous, using the same nesting site year after year; Verreaux's Eagle Owls have been known to use nests built by other birds, nest in tree cavities, or on the ground. Two eggs are laid, with up to a seven-day laying interval, and incubated (almost exclusively by the female) for 32-39 days. White and fluffy at hatch, owlets develop quickly, fledging at 63 days. Juveniles of this species have been known to remain with parents for up to two years, and have been observed assisting in the rearing of subsequent broods (a behavior unusual among owls). Parents can be very aggressive within their nesting territory, but like many owls, may also be very sensitive to disturbance, potentially abandoning eggs or young when disturbed.

While the adaptability of this species has allowed them to make use of even altered habitats, human persecution remains among the most significant threats to their future well-being. Negative superstitions about owls are pervasive throughout eastern and southern Africa. While Verreaux's Eagle Owl is common in some parts of the range, global population trends have not been quantified, and the species remains vulnerable to a host of potential threats, due in part to their position at the apex of African savanna food chains. Despite protected status, no detailed data on wild populations exist. As is the case with many large raptors, efforts must be made to protect nesting territories (and potential territories) from additional development.

The first recorded appearance of Verreaux's Eagle Owl in North American zoological collections occurred in September 1941, with the importation of 00.01.00 bird to the Bronx Zoo; the first successful North American captive hatch occurred at Riverbanks Zoo in April 1977. While the species was never historically housed in large numbers in North American collections, there is considerable interest in working with Verreaux's Eagle Owls in the future. Potential additional founder stock has been identified in European and South African collections; the addition of new bloodlines to the North American population would be particularly beneficial.

Program Goals/Objectives:
Goal #1 – Identify AZA partners willing and able to participate in an importation of new founder stock, either from European zoo collections or from Africa.

Goal #2 – Monitor outreach program owls, encouraging additional facilities to allow program birds the opportunity to breed during "off season," following National Aviary's management model. Work with AZA's Ambassador Animal Scientific Advisory Group to further strengthen connections (and communication) between outreach animal management and population management communities.

Goal #3 – Evaluate long-term prognosis for this species; if no improvement in demographics or genetic status are noted in the next five years (in time for the next Raptor TAG RCP), recommend phase out.

Conservation Projects/Connections:

- No conservation programs in place at this time. The population is stable in most regions.

Demographics and Genetics

Current Population Size (N)	20
Males	9
Females	8
Unknown	3
Target Population Size	Unk
Historic Population Growth Rate	Unk
Projected Population Growth Rate	Unk
Current Founders	6
Gene Diversity (GD) Retained (%)	78.01
Population Mean Kinship (MK)	0.2199
Mean Inbreeding (F)	0.0147
Gene Diversity at 100 Years From Present (%)	Unk

Red SSP
Hooded Vulture

Species: Hooded Vulture (*Necrosyrtes monachus***)**

Current Population:

- **AZA – 20.14.1 (35 at ten institutions) (2012 AZA studbook)**
- **2014 Space Survey - 32**

Wild Population

- **CITES – I I**
- **IUCN - Endangered**
- **FWS – Not listed**

Program Manager: Tom Schneider

Other Regional Program Status: None

Description: Small Old World vulture that can be maintained in open exhibits or covered aviaries. They can be kept with many other avian species including flamingos, spoonbills, and crowned cranes. They are not winter hardy, and shelter must be provided when temperatures drop below 40 °F. Some individuals can be very skittish when in close proximity to people and care must be taken when housed in small confined spaces, such as winter holding stalls or quarantine areas.

Program Goals/Objectives:

Goal #1/Essential Action(s) Improve sustainability of species / Update studbook by September 2015 and publish BTP by fall 2016.

Goal #2/Essential Action(s) Improve sustainability of species / Recruit two additional institutions to participate in this program by 2016.

Goal #3/Essential Action(s) Conservation Education / Develop educational message describing threats hooded vultures face in the wild.

Conservation Projects/Connections:

This species has undergone a rapid decline throughout most of its range. Major threats include poisoning to hide the location of poacher kills, hunting for bush meat, and loss of habitat. No current AZA programs in place at this time.

Demographics and Genetics:

Current Population Size (N)	35
Males	20
Females	14
Unknown	1
Target Population Size	50
Historic Population Growth Rate	0.99
Projected Population Growth Rate	1.024
Current Founders	14
Gene Diversity (GD) Retained (%)	92.04
Population Mean Kinship (MK)	0.0.796
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present	11.9%

Candidate Species

Harpy Eagle

Species: Harpy Eagle *(Harpia harpyja)*

Current Population:

- **AZA: 15 (8.7)**
- **2014 Space Survey**

Wild Population Status

- **CITES I**
- **IUCN: Near Threatened**
- **FWS**

Studbook Keeper: Vacant

Other Regional Program Status:

Description: The Harpy Eagle, *Harpia harpyja*, is the heaviest and most powerful of all eagles. Historically, the species had a wide range extending throughout tropical America from southern Mexico to northern Argentina. Today, however, it is considered rare and near threatened, especially in the northern part of its range. Wild Harpy Eagles are declining in number due mainly to deforestation and trophy shooting.

The species is dimorphic, with females being significantly larger than the males. Adult wild Harpy Eagles only breed every 2-3 years due to the considerable parental care involved. Nests are large structures of sticks built by both sexes in the fork of an emergent tree. A two egg clutch is common, although only one chick is raised to maturity. The incubation period is 54-56 days and chicks fledge at ~ 140 days. The female carries out most of the incubation, but is assisted by the male. In the wild, juveniles remain in the nest territory for at least 12 months.

Program Goals/Objectives:

The current population of harpy eagles is 15 animals in AZA institutions. Demographic analyses indicated if the population continues to grow at its historic rate (approximately one hatch per year), the population will reach the target size set by the Taxon Advisory Group in 2009 of 30 animals in about 15 years. Only 2 pairs have successfully hatched chicks. The pair at San Diego, which has since died and the sibling pair at Miami MetroZoo. There has been a recent import of a captive reared pair from Portugal. Recommend 1) 3 Females to breed and 2) no transfers

Goal #1 – Evaluate current pairs and their set ups and see what may be missing in getting these large birds to breed. Cross reference with what is known of the birds which have been successful. Should have a preliminary survey available by end of year 2015.

Goal #2 – Investigate the possibility of adding more institutions to work with Harpy eagles.

Conservation Projects/Connections:

Demographics and Genetics

Current Population Size (N)	15
Males	8
Females	7
Unknown	0
Target Population Size	30
Historic Population Growth Rate	1.017
Projected Population Growth Rate	1.044
Current Founders	3
Gene Diversity (GD) Retained (%)	74.38
Population Mean Kinship (MK)	0.2562
Mean Inbreeding (F)	0
Gene Diversity at 100 Years From Present (%)	40

Appendix VI

	Scientific Name	Sex ratio of specimens currently in breeding facilities (e.g., 2.2.0)			Sex ratio of specimens currently in holding/ education facilities?			Sex ratio of specimens that you plan to have in breeding facilities in five years?			Sex ratio of specimens that you plan to have in holding education facilities in five years?		
		M	F	U	M	F	U	M	F	U	M	F	U
New World Vultures													
King Vulture	*Sarcorhamphus papa*	20	20		11	14	2	26	25		7	11	5
Andean Condor	*Vultur gryphus*	16	19		4	4		17	17	3	4	5	
Turkey Vulture	*Cathartes aura*	4	4	3	35	33	28	1	3	5	31	26	37
California Condor	*Gymnogyps californianus*	21	21	5	2	6		23	20		2	18	
Black Vulture	*Copagyps atratus*		1		14	11	12		2		12	9	21
Old World Vultures													
Eurasian Black Vulture	*Aegypius monachus*	17	18		3	9		21	22	2	3	4	4
Bearded Vulture	*Gypaetus barbatus*							1	1	4			
Palm-nut Vulture	*Gyoheirax angolensis*	3	2					2	2				
African White-backed Vulture	*Gyps africanus*	5	4		1			7	7				
Oriental White-backed Vulture	*Gyps bengalensis*				1						1		
Cape Griffon	*Gyps coprotheres*	16	14			1		26	26				2
Eurasian Griffon	*Gyps fulvus*					1						1	
Ruppell's Griffon	*Gyps ruppelli*	15	20		7	9		26	27	1	6	1	2
Hooded Vulture	*Necrosyrtes monachus*	14	13		1	4		13	13		1	3	1
Egyptian Vulture	*Neophron percnopterus*	3	2					5	5				2
Red-headed Vulture	*Sarcogyps calvus*												
Lappet-faced Vulture	*Torgos tracheliotus*	14	11					16	17		1	1	

White-headed Vulture	*Trigonoceps occipitalis*	**1**			**1**			**2**	**2**				
Hawks, Eagles, etc..													
Cooper's Hawk	*Accipiter cooperii*				**1**						**1**		**1**
Eurasian Sparrowhawk	*Accipter nisus*												
Sharp-shinned Hawk	*Accipiter striatus*												
White-tailed Hawk	*Buteo albicaudatus*												
Red-tailed Hawk	*Buteo jamaicensis*	**5**	**5**	**1**	**35**	**51**	**22**	**6**	**5**	**2**	**33**	**46**	**31**
Rough-legged Hawk	*Buteo lagopus*				**2**	**2**	**3**				**2**	**2**	**3**
Red-shouldered Hawk	*Buteo lineatus*				**3**	**1**	**6**				**2**		**7**
Grey Hawk	*Buteo nitidus*					**1**						**1**	
Broad-winged Hawk	*Buteo platypterus*				**1**	**2**	**2**					**2**	**4**
Red-backed Hawk	*Buteo polyosoma*												
Ferruginous Hawk	*Buteo regalls*	**1**			**1**	**3**		**1**			**1**	**3**	**1**
Jackal Buzzard	*Buteo rufofuscus*				**1**								**1**
Hawaiian Hawk	*Buteo soliterius*				**1**	**1**	**1**				**1**	**1**	**1**
Swainson's Hawk	*Buteo swainsonii*	**2**			**5**	**3**	**5**	**2**			**4**	**2**	**6**
Harris Hawk	*Parabuteo unicintus*	**2**	**3**	**2**	**43**	**26**	**6**	**1**	**2**		**41**	**24**	**19**
Northern Harrier	*Circus cyaneus*						**1**						**1**
Mississippi Kite	*Ictinia mississippiensis*				**3**	**3**	**3**				**1**	**3**	**2**
Black Kite	*Milvus migrans*												
Bald Eagle	*Haliaeetus leucocephalus*	**20**	**18**	**2**	**57**	**76**	**8**	**17**	**14**	**3**	**53**	**73**	**19**
Stellar's Sea Eagle	*Haliaeetus peligicus*	**7**	**7**	**3**	**3**	**1**		**8**	**8**				
African Fishing Eagle	*Haliaeetus vocifer*	**1**	**1**			**6**		**2**	**2**	**1**	**1**	**5**	
White-tailed Sea Eagle	*Haliaeetus leucogaster*	**1**	**1**					**1**	**1**				

Golden Eagle	*Aquila chrysaetos*	**1**	**2**		**10**	**12**	**1**	**3**	**3**	**1**	**8**	**13**	**5**
Tawny Eagle	*Aquila rapex*												
Verreaux'z Eagle	*Aquila verreauxi*												
Harpy Eagle	*Harpia harpyja*	**5**	**4**	**1**				**7**	**7**	**1**	**1**	**1**	
Ornate Hawk Eagle	*Spizaetus ornatus*	**1**	**1**			**1**		**1**	**1**			**1**	
African Crowned Eagle	*Stephanoaetus coronatus*	**3**	**2**			**1**		**3**	**3**				
Bataleur Eagle	*Terathoplus ecaudatus*	**2**	**2**		**3**	**5**	**1**	**4**	**4**		**3**	**3**	**2**
Secretary Bird	*Sagittarius serpentarius*	**11**	**9**		**4**	**1**		**14**	**15**		**2**	**1**	**1**
Osprey	*Pandion haliaetus*				**1**	**2**					**1**	**2**	
Crested Caracara	*Polyborus plancus*	**3**	**5**	**1**	**4**	**6**	**1**	**4**	**5**	**1**	**4**	**4**	**7**
Falcons													
Merlin	*Falco columbarius*				**1**	**3**					**1**	**2**	**1**
Prairie Falcon	*Falco mexicanus*				**1**	**1**	**1**				**1**		**1**
Peregrine Falcon	*Falco peregrinus*	**2**	**1**		**5**	**12**	**4**	**3**	**3**		**7**	**12**	**14**
Gyrfalcon	*Falco rusticolus*				**2**	**1**						**1**	**1**
American Kestral	*Falco sparverius*				**25**	**9**	**5**			**4**	**28**	**12**	**19**
Lanner Falcon	*Falco biarmicus*				**2**	**3**			**1**		**3**	**4**	**2**
Saker Falcon	*Falco cherrug*												
Lagger Falcon	*Falco jugger*				**1**	**1**					**1**	**1**	
African Pygmy Falcon	*Polihierax semitorquatus*	**15**	**11**	**5**	**6**	**1**		**18**	**18**	**7**	**7**	**2**	**7**
Barn Owls													
Barn Owl	*Tyto alba*	**9**	**7**		**37**	**36**	**22**	**13**	**15**	**2**	**36**	**31**	**38**
Typical Owls													

Saw whet Owl	*Aegolius acadicus*				**2**	**1**	**2**	**1**	**1**		**2**		**7**
Short-eared Owl	*Asio flammeus*					**2**						**3**	**2**
Long-eared Owl	*Asio otus*		**1**	**1**			**3**			**2**	**2**	**2**	**2**
Burrowing Owl	*Athene cunicularia*	**16**	**22**		**15**	**17**	**1**	**22**	**22**	**3**	**18**	**15**	**12**
Great Horned Owl	*Bubo virginianus*	**3**	**4**		**41**	**36**	**16**	**3**	**8**		**37**	**37**	**22**
Ferruginous Pygmy Owl	*Glaucidiun brasillanum*												
Elf Owl	*Micrathene whitneyi*						**1**	**1**	**1**				**1**
Snowy Owl	*Bubo sandiaca*	**10**	**12**		**6**	**8**	**2**	**14**	**17**	**2**	**8**	**8**	**6**
Eastern Screech Owl	*Otus asio*	**4**	**2**		**39**	**30**	**63**	**2**	**2**		**38**	**34**	**77**
Western Screech Owl	*Otus kennicotti*		**2**	**1**	**7**	**6**	**1**		**1**		**7**	**8**	**5**
Spotted Owl	*Strix occidentalis*					**1**						**1**	
Barred Owl	*Strix varia*	**2**	**4**	**3**	**15**	**14**	**26**		**4**	**5**	**17**	**15**	**30**
Eurasian Eagle Owl	*Bubo lacteus*	**8**	**4**		**14**	**12**	**3**	**9**	**7**	**3**	**13**	**13**	**4**
Milky Eagle Owl	*Bubo bubo*	**5**	**4**		**5**	**1**		**6**	**6**		**4**		**2**
Mottled Owl	*Ciccabba virgata*												
White-faced Scops Owl	*Otus leucotis*	**2**			**1**			**4**	**3**		**1**	**1**	
Spectacled Owl	*Pulsatrix perspicillata*	**8**	**11**		**12**	**8**	**2**	**14**	**13**	**2**	**11**	**6**	**5**
Tawny Owl	*Strix aluco*												
Great Gray Owl	*Strix nebulosa*	**4**	**6**					**4**	**6**		**1**	**1**	**1**
Additional Species Not Listed													
Short-tailed Hawk	*Buteo brachyurus*						**1**						**1**
Aplomado Falcon	*Falco femoralis*				**1**	**1**					**1**	**1**	**2**
Gyrfalcon/Saker Hybrid					**1**						**1**		
Pharoah Eagle Owl	*Bubo ascalaphus*				**1**							**1**	

Mountain Pygmy Owl	*Glaucidium gnoma*						**1**							
Oriental Bay Owl	*Phodius badius*				**1**	**1**					**1**	**1**		
Martial Eagle		**1**	**1**		**1**			**1**	**1**		**1**			
Yellow headed vulture	*Cathartes melambrotus*													**1**

Photo Credit: Tracy Aviary

Appendix VII

Raptor TAG Program Leaders

SPECIES	SCOPE OF MANAGEMENT PROGRAM	CHAIR, MANAGER OR CHAMPION	INSTITUTION	PHONE	FAX	E-MAIL
King Vulture *Sarcoramphus papa*	Green SSP Regional Studbook	Shelly Collinsworth	Fort Worth Zoo	817-759-7212		scollinsworth@fortworthzoo.org
Andean Condor *Vultur gryphus*	Yellow SSP	Michael Mace	San Diego Zoo Safari Park	760-738-5078	760- 480-9574	mmace@sandiegozoo.org
Andean Condor *Vultur gryphus*	North American Regional Studbook	Ron Webb	San Diego Zoo Safari Park	760-747-8702		rwebb@sandiegozoo.org
California Condor *Gymnogyps californianus*	Yellow SSP	Mike Wallace	San Diego Zoo	619-744-3313	619-744-3314	mwallace@sandiegozoo.org
California Condor *Gymnogyps californianus*	International Studbook	Michael Mace	San Diego Wild Animal Park	760-738-5078	760-480-9573	mmace@sandiegozoo.org
Eurasian Black Vulture *Aegypius monachus*	Yellow SSP Regional Studbook	Mary Jo Willis	Denver Zoo	720-496-9010	720-337-1626	mjwillis@denverzoo.org
African White-backed Vulture *Gyps africanus*	Red SSP Regional Studbook	Susie Kasielke	Los Angeles Zoo	323-644-4745	323-662-9786	susie.kasielke@lacity.org
Cape Griffon Vulture *Gyps coprotheres*	Red SSP Regional Studbook	Susie Kasielke	Los Angeles Zoo	323-644-4745	323-662-9786	susie.kasielke@lacity.org
Ruppell's Griffon Vulture *Gyps rueppelli + G. r. rueppelli*	Yellow SSP Regional Studbook	Bryan Emberton	Disney's Animal Kingdom	407-938-2808	407-939-6391	bryan.emberton@disney.com
Hooded Vulture *Necrosyrtes monachus*	Red SSP Regional Studbook	Tom Schneider	Detroit Zoo	248-398-0903		tschneider@detroitzoo.org
Stellar's Sea Eagle *Haliaeetus pelagicus + H. p. pelagicus*	Candidate Species Regional Studbook	Beau Parks	San Diego Zoo	619-231-1515 ext. 4424		bparks@sandiegozoo.org
Harpy Eagle *Harpia harpyja*	Candidate Species International Studbook	Beau Parks	San Diego Zoo	619-231-1515 ext. 4424		bparks@sandiegozoo.org
Lappet-faced Vulture *Torgos tracheliotus*	Red SSP Regional Studbook	Debbie Milligan	Dallas Zoo	214-670-6826	214-670-7450	Debbie.milligan@dallaszoo.com
Secretary Bird *Sagittarius serpentarius*	Red SSP Regional Studbook	Michelle Handrus	San Diego Zoo Safari Park	760-747-8702		mhandrus@sandiegozoo.org
African Pygmy Falcon *Polihierax semitorquatus*	Red SSP Regional Studbook	Nicole LaGreco	San Diego Zoo	619-744-3355		nlagreco@sandiegozoo.org
Eurasian Eagle Owl *Bubo bubo + B. b. bubo Only*	Yellow SSP Regional Studbook	R. Harrison Edell	Dallas Zoo	469-554-7201		harrison.edell@dallaszoo.com

Verreaux's Eagle Owl *Bubo lacteus*	Red SSP Regional Studbook	R. Harrison Edell	Dallas Zoo	469-554-7201		harrison.edell@dallaszoo.com
Spectacled Owl *Pulsatrix perspicillata +* *P. p. perspicillata*	Yellow SSP Regional Studbook	Steve Sarro	Smithsonian National Zoological Park	202-633-3242		sarros@si.edu
Burrowing Owl *Athene cunicularia +* *A. c. floridana +* *A. c. hypugaea*	Yellow SSP Regional Studbook	Yvonne Strode	Peoria Zoo	309-686-3365 ext. 302	309-685-6240	ystrode@peoriazoo.org
Snowy Owl *Nyctea scandiaca*	Yellow SSP Regional Studbook	Cody Hickman	Chicago Zoological Society – Brookfield Zoo			Cody.hickman@czs.org

Photo Credit: Chelsea Stover, Dallas Zoo

Appendix VIII

Program Review Table

Green SSP	Program Start Date	Manager Start Date	Last Report Submit Date	Next Report Due	Program Manager	Organization
King Vulture	2/10/1988	25-Sep-07		2/13/2017	Shelly Collinsworth	Fort Worth Zoo
Yellow SSP	**Program Start Date**	**Manager Start Date**	**Last Report Submit Date**	**Next Report Due**	**Program Manager**	**Organization**
Andean Condor	10/1/2003	10/1/2003	10-Apr-07	2/29/2016	Michael Mace	San Diego Zoo Safari Park
California Condor	10/5/1988	10/5/1988	01-Sep-07	N/A	Mike Wallace	San Diego Zoo
Eurasian Black Vulture	8/19/1993	10/12/2000	2/20/12	1/9/2017	Mary Jo Willis	Denver Zoo
Ruppell's Griffon Vulture	3/15/2006	3/15/2006	12/17/20012		Bryan Emberton	Disney's Animal Kingdom
Burrowing Owl	4/8/1996	12/31/1997	10/14/2014		Yvonne Strode	Peoria Zoo
Eurasian Eagle Owl	3/15/2006	3/15/2007	8/25/2011	6/8/2015	Harrison Edell	Dallas Zoo
Snowy Owl	3/15/2006	4/4/12	3/12/2011	7/25/2017	Cody Hickman	Chicago Zoological Society - Brookfield Zoo
Spectacled Owl	2/12/1992	12/31/1992	4/3/2012		Steve Sarro	Smithsonian National Zoological Park
Red SSP	**Program Start Date**	**Manager Start Date**	**Last Report Submit Date**	**Next Report Due**	**Program Manager**	**Organization**
African White-backed Vulture	3/15/2006	3/15/2006	1/7/2015		Susie Kasielke	Los Angeles Zoo and Botanical Gardens
Cape Griffon Vulture	3/15/2006	3/15/2006	1/7/2015		Susie Kasielke	Los Angeles Zoo and Botanical Gardens
Lappet-faced Vulture	3/15/2006	3/15/2006	6/15/12	12/14/2015	Debbie Milligan	Dallas Zoo
Hooded Vulture	5/15/2009	8/24/2010		9/29/2015	Tom Schneider	Detroit Zoo
Harpy Eagle	3/15/2006	4/4/2012	12/1/2014		Vacant	
Secretary Bird	3/15/2006	4/1/2015	11/16/2012		Michelle Handrus	San Diego Zoo Safari Park
Stellar's Sea Eagle	4/1/2009	4/1/2015	9/1/2011		Beau Parks	San Diego Zoo
African Pygmy Falcon	7/8/1996	8/5/2008	8/22/12		Nicole LaGreco	San Diego Zoo
Verreaux's Eagle Owl	3/15/2006	3/20/2007	8/25/2011	6/8/2015	Harrison Edell	Dallas Zoo

Studbook Programs	Program Start Date	Manager Start Date	Last Report Submit Date	Next Report Due	Program Manager	Organization
Andean Condor Studbook	12/31/1988	9/5/2013	9/5/2012	6/2016	Ron Webb	San Diego Zoo Safari Park
California Condor Studbook	10/5/1988	6/16/1998	3/14/2014	1/31/2017	Michael Mace	San Diego Zoo Safari Park
Eurasian Black Vulture Studbook	8/16/1993	10/12/2000	7/3/2013	6/27/2016	Mary Jo Willis	Denver Zoological Gardens
African White-backed Vulture Studbook	3/15/2016	3/15/2006	1/7/2015		Susie Kasielke	Los Angeles Zoo and Botanical Gardens
Cape Griffon Vulture Studbook	3/15/2006	3/15/2006	1/7/2015		Susie Kasielke	Los Angeles Zoo and Botanical Gardens
Hooded Vulture Studbook	5/15/2009	8/24/2010	12/17/2012	9/29/2015	Tom Schneider	Detroit Zoo
King Vulture Studbook	2/10/1988	8/24/2010	2/13/2015		Shelly Collinsworth	Fort Worth Zoo
Lappet-faced Vulture Studbook	3/15/2006	3/15/2006	3/29/2013	12/14/2015	Debbie Milligan	Dallas Zoo
Ruppell's Griffon Vulture Studbook	3/15/2006	3/15/2006	2/1/2015		Bryan Emberton	Disney's Animal Kingdom
African Pygmy Falcon Studbook	7/8/1996	8/5/2008	8/20/2015	8/20/2018	Nicole LaGreco	San Diego Zoo
Harpy Eagle Studbook	3/15/2006	4/4/2012	2/8/2011		Janice Owlett	San Diego Zoo
Secretary Bird Studbook	3/15/2006	4/1/2015	11/16/2012		Michelle Handrus	San Diego Zoo Safari Park
Stellar's Sea Eagle Studbook	4/1/2009	4/1/2015	9/1/2011		Beau Parks	San Diego Zoo
Burrowing Owl Studbook	4/8/1996	12/31/1997	1/10/2014	12/15/2016	Yvonne Strode	Peoria Zoo
Eurasian Eagle Owl Studbook	3/15/2006	20-Mar-07	7/21/2014	4/17/2017	Harrison Edell	Dallas Zoo
Snowy Owl Studbook	3/15/2006	4/4/2012	7/11/2013	6/1/2016	Cody Hickman	Chicago Zoological Society - Brookfield Zoo
Spectacled Owl Studbook	2/12/1992	12/31/1992	12/6/2013	11/1/2016	Steve Sarro	Smithsonian National Zoological Park
Verreaux's Eagle Owl	3/15/2006	3/20/2007	8/25/2011	6/8/2015	Harrison Edell	Dallas Zoo

Appendix IX

PROGRAM SPECIES ROLES

To assist with understanding the role that raptors play in our programs here is a brief look at what each of our program species has to offer. This is not an all inclusive list and reflects the TAG's belief in making sure that every species we work with has an education component that can be used to raise awareness for the group.

SPECIES	Conservation Function	Education Function	Research Function
King Vulture	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Andean Condor	Genetic reservoir for Colombian reintroduction program. AZA population genetically and demographically stable	In-situ and ex-situ conservation and education	In-situ research
California Condor	Genetic reservoir for North American reintroduction program.	In-situ conservation and education	
Eurasian Black Vulture	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	Artificial insemination study
African White-backed Vulture	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Cape Griffon Vulture	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Ruppell's Griffon Vulture	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Hooded Vulture	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education Interesting adaptability story	
Stellar's Sea Eagle	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Harpy Eagle	Ensure AZA population is genetically and demographically stable	In-situ and ex-situ conservation and education	
Lappet-faced Vulture	Ensure AZA population is genetically and demographically stable	In-situ and ex-situ conservation and education	
Secretary Bird	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	Ex-situ research

African Pygmy Falcon	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Eurasian Eagle Owl	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Spectacled Owl	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	
Burrowing Owl	Ensure AZA population is genetically and demographically stable	In-situ and ex-situ conservation and education	
Snowy Owl	Ensure AZA population is genetically and demographically stable	In-situ and ex-situ conservation and education	
Verreaux's Eagle Owl	Ensure AZA population is genetically and demographically stable	Ex-situ conservation and education	

Appendix X

Program Goals

Common Name / Scientific Name	King Vulture; *Sarcoramphus papa*
Animal Program Designation	Green SSP
Primary Role	Conservation action
Goal #1 / Essential Action(s)	On going maintainence of genetic and demographic health of the long term population.
Goal #2 / Essential Action(s)	Planned re-integration of imprinted program animals into breeding situations once they reach 4 to 5 years of age and become too aggressive to handle. The intent is to reduce the number of single birds who are no longer in use as program animals due to aggression, and reintigrate them into the breeding population.
Goal #3 / Essential Action(s)	Investigate mixing and *exchanging* genetic stock with EAZA bloodlines before the next planning session.
Common Name / **Scientific Name**	Burrowing Owl; *Athene cunicularia*
Animal Program Designation	Yellow SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Increase genetic diversity; make recommendations annually – full PMP every 3 years, use MateRx other 2 years. Research history of past non-releasable birds successfully breeding, i.e., do any specific injuries prevent copulation? Encourage participating institutions to acquire non-releasable wild caught bird whenever possible – if not possible, contact SSP coordinator (goal of at least 2 new founders annually).
Goal #2 / Essential Action(s)	Maintain non-breeding population *for* use as program animals. Survey all current and potential program participants to quantify need and stress importance of not using genetically valuable birds for education (in conjunction with annual needs/wants survey). If necessary, breed pairs with lower MK values for education. Disseminate information to increase value of using species as program animals (add section to 2015 studbook)

Goal #3 / Essential Action(s)	Increase participation of AZA institutions in current/future release programs. Survey current holding institutions on interest/available resources (in conjunction with 2015 needs/wants survey in Aug/Sept). Work with institutions and rehabilitators in northern states of range to recruit wild caught birds.
Common Name / Scientific Name	Snowy Owl; Bubo scandiacus
Animal Program Designation	Yellow SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Recruit participants to *research* the effects of altered photoperiod on breeding success in snowy owls. In the hopes that snowy owls will breed earlier in the season.
Goal #2 / Essential Action(s)	Build relationships with rehab facilities to bring in new founder stock that has been deemed unable to be released back into the wild.
Goal #3 / Essential Action(s)	Increase the number of participating institutions by at least two facilities by December 2016
Common **Name / Scientific Name**	Ruppell's Vulture; *Gyps rueppelli*
Animal Program Designation	Yellow SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Increase participating facilities by 3 over the next year and 5 within 5 years. This will allow for an increased number of holding spaces. The TAG has the target population set at 75 birds. Bringing more facilities on line will allow for this goal to be achieved.
Goal #2 / Essential Action(s)	Organize and share best practices for exhibit design and breeding set up. I will do this by maintaining direct communication via email and phone calls. This will allow facilities that have not yet been successful breeding to bring together resources and become successful breeding institutions.
Goal #3 / Essential Action(s)	Increase communication. I will reach out quarterly to each institution to see if they need any information or assistance. This will facilitate better relationships and allow for faster responses to needs that arise.
Common Name / Scientific Name	California condor; Gymnogyps californianus

Animal Program Designation	Yellow SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Considering genetic, demographic and behavioral factors build 3 disjunct populations (2 in the wild within the species former range and one in captivity each numbering at least 150 birds. Self-sustaining nutritionally and reproductively with acceptable survivorship.
Common Name / **Scientific Name**	Andean condor*; Vultur gryphus*
Animal Program Designation	Yellow SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	In 2012, the SSP began working with Asociacion Colobiana De Parques Zoologicos Y Arcuarios (ACOPAZOA) to assist them in establishing Andean condors in Colombian zoos that, in the future, would produce offspring for release into the wild.
Goal #2 / Essential Action(s)	- In the future, in collaboration with Houston Zoo and Weltvogelpark Walsrode, SSP members are providing training to key zoo staff on incubation techniques.
Goal #3 / Essential Action(s)	Support and expand the educational outreach programs that have been established. Project Wild and Windows on the Wild
Common Name / Scientific Name	Spectacled Owl; Pulsatrix perspicillata
Animal Program Designation	Yellow SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Explore importing 4 – 6 spectacled owls from Trinidad into our managed population to increase genetic diversity. Hopeful import by end of 2016.
Goal #2 / Essential Action(s)	Monitor the outreach program owls and encourage swapping of genetically valuable animals into breeding situations as needed.
Goal #3 / Essential Action(s)	Appoint a new co-coordinator for the SSP to "train the next generation" to be in place by the end of 2015.
Common Name / Scientific Name	Secretary Bird; Sagittarius serpentarius
Animal Program Designation	Red SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	As a new program manager the first order is to attend studbook school and do an updated studbook and population analysis.
Goal #2 / Essential Action(s)	Evaluate and assess the current holding/exhibit conditions of Secretary birds and discuss breeding strategies to help increase breeding success.
Goal #3 / Essential Action(s)	Long term goal is to produce a husbandry manual but will follow the direction of the TAG as to when that needs to be done.

Common Name / Scientific Name	African Pygmy Falcon*; Polihierax semitorquatus*
Animal Program Designation	Red SSP

Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Import birds from private collection, currently held at EAZA facility, to increase gene diversity.
Goal #2 / Essential Action(s)	Increase parent rearing success--work with current facilities who are successful to develop protocol.
Goal #3 / Essential Action(s)	Increase the number of holding facilities.
Common Name / Scientific Name	Steller's Sea Eagle; Haliaeetus pelagicus
Animal Program Designation	Red SSP
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Make contact with institutional reps and collect taxon reports from all holder institutions. Familiarize myself with points of contact, exhibit specifications and husbandry procedures at those institutions.
Goal #2 / Essential Action(s)	*Identify and recruit new holder institutions.*
Goal #3 / Essential Action(s)	Publish studbook by 12/31/15. Population has not been processed with PMC and will be done once the studbook is published.
Common **Name / Scientific Name**	Harpy Eagle; *Harpia harpyja*
Animal Program Designation	Candidate Species
Primary Role	Conservation Action
Goal #1 / Essential Action(s)	Evaluate current pairs and their set ups and see what may be missing in getting these large birds to breed. Cross reference with what is known of the birds which have been successful. Should have a preliminary survey available by end of year 2015.
Goal #2 / Essential Action(s)	Investigate the possibility of adding more institutions to work with Harpy eagles.
Common **Name / Scientific Name**	Cape vulture; Gyps coprotheres
Animal Program Designation	Red SSP
Primary Role	Exhibit/General Education, Assurance populatoin
Goal #1 / Essential Action(s) 2014	develop reliable breeding husbandry practices
Progress	holding institutions are documenting & sharing information on breeding
Goal #2 / Essential Action(s) 2014	recruit additional AZA institutions to provide increased breeding space
Progress	SSP coordinator continues to approach potential facilities
Goal #3/ Essential Action(s) 2014	seek opportunities to initiate and enhance conservation efforts
Progress	*individual institutions have initiated contact with NGOs*
Goal #1 / Essential Action(s) 2015	continue documenting & sharing information; encourage others to follow
Goal #2/ Essential Action(s) 2015	one new facility has appropriate breeding space & has requested birds
Goal #3/Essential Action(s) 2015	coordinate efforts among AZA facilities

Common Name / Scientific Name	White-backed vulture, *Gyps africanus*
Animal Program Designation	Red SSP
Primary Role	Exhibit/General Education, Assurance populatoin
Goal #1 / Essential Action(s) 2014	develop reliable breeding husbandry practices
Progress	holding institutions are documenting & sharing information on breeding
Goal #2 / Essential Action(s) 2014	recruit additional AZA institutions to provide increased breeding space
Progress	SSP coordinator continues to approach potential facilities
Goal #3/ Essential Action(s) 2014	seek opportunities to initiate and enhance conservation efforts
Progress	individual institutions have initiated contact with NGOs
Goal #1 / Essential Action(s) 2015	continue documenting & sharing information; encourage others to follow
Goal #2/ Essential Action(s) 2015	one new facility has appropriate breeding space & has requested birds
Goal #3/Essential Action(s) 2015	coordinate efforts among AZA facilities

Appendix XI

Non-responsive institutions for the space survey:

Bramble Park Zoo
Bronx Zoo
Chattanooga Zoo at Warner Park
Fresno Chaffee Zoo
Kansas City Zoo
National Aviary
Oregon Zoo
Pittsburgh Zoo and PPG Aquarium
Roger Williams Park Zoo
SeaWorld San Antonio
Vancouver Aquarium Marine Science Center

Appendix XII

AZA RAPTOR TAG Taxon Listing

FAMILY CATHARTIDAE (NEW WORLD VULTURES)

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Turkey Vulture *Cathartes aura* Subspecies (4) *C.a. aura, C.a. septentrionalis, C.a. ruficollis, C.a. jota*	North, Central and South America.	Not globally threatened (NGT) Widespread and abundant with increasing range.	Phase Out
Lesser Yellow-headed Vulture *Cathartes burrovianus*	Central America S to C Colombia and NW Venezuela, lowland South America.	NGT. Status and distribution poorly known. Populations appear widespread and common.	Not recommended
Greater Yellow-headed Vulture *Cathartes melambrotus*	Amazonia, including S. Venezuela and the Guianas.	NGT.	Not recommended
American Black Vulture *Coragyps atratus*	S USA, N Mexico, Central America and N& E South America.	NGT; widespread and common	Phase Out
King Vulture *Sarcoramphus papa*	Tropical forest and savanna regions of Central and South America (Mexico – N Argentina).	NGT. CITES III Honduras	Green SSP
California Condor *Gymnogyps californianus*	Historic range = Mountains of Pacific coast of North America.	Endangered. CITES I. One of the most critically endangered bird species. Extinct in wild from 1982-1992. Current Reintroduction program from captive population back to former range	Yellow SSP
Andean Condor *Vultur gryphus*	Andes from Venezuela to Tierra del Fuego. Sea level in Chile and Peru.	NGT. CITES I. Currently threatened over most of range. Reintroduction effort using captive bred birds underway in Columbia and Venezuela.	Yellow SSP

FAMILY PANDION

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Osprey	***P.h.haliaetus*** – Scandinavia E	NGT. CITES II. Frequent to	Phase Out

Pandion haliaetus 4 subspecies *P.h.haliaetus, P.h. carolinensis, P.h.ridgwayi, P.h.cristatus*	to Japan, S to Mediterranean, Red Sea & Cape Verde Is.; winters S. Africa, India, W. Indonesia & Philippines. ***P.h. carolinensis*** – Labrador W to Alaska and S. to Arizona and Florida. Winters S to Peru and S Brazil. ***P.h. ridgwayi*** – Caribbean, including Bahamas, Cuba and Belize. ***P.h. cristatus*** – Australia e to New Caledonia, N through New Guinea, Java and Sulawesi.	abundant throughout most of range.	

FAMILY ACCIPITRIDAE (HAWKS & EAGLES)

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
African Cuckoo-hawk *Aviceda cuculoides* 3 subspecies *A.c.cuculoides, A.c. batesi,* *A.c. verreauxii*.	***A.c.cuculoides*** – Senegal E to SW Ethiopa, S to Nigeria and N Zaire. ***A.c. batesi*** – lowland rainforest from Sierra Leone E to E Uganda & S to N Angola. ***A.c. verreauxii*** – woodland & coastal riparian & montane forest Kenya S to N Namibia and S. Africa.	NGT. CITES II.	Not recommended
Madagascar Cuckoo-hawk *Aviceda madagascariensis*	Madagascar.	NGT. CITES II. Considered near threatened	Not recommended
Jerdon's Baza *Aviceda jerdoni* 5 subspecies *A.j.ceylonesis, A.j. Jerdoni,* *A.j. borneensis, A.j. magnirostris,* *A j. celebensis*	***A.j. ceylonesis*** – SW India & Sri Lanka. ***A.j. jerdoni*** – NE India – Burma, S China, Thailand, parts of Indochina to N Malay Pennisula. ***A.j. borneensis*** –Borneo. ***A.j. magnirostris*** – Phillipines. ***A.j. celebensis*** – Sulawesi, Banggai Is & Sula Is.	NGT. CITES II. Uncommon to rare throughout range.	Not recommended
Pacific Baza *Aviceda subcristata* 13 subspecies: *A.s. timorlauensis,* *A.s. pallida, A.s. reinwardtii,* *A.s. stresemanni,* *A.s. rufa,* *A s. waigeuensis, A s. obscura,* *A.s. stenozona, A.s.*	Islands off Sulawesi, Lesser Sundas, N, C & S Moluccas, Waigeo I, Biak I, E, W New Guinea, Aru Is, Admiralty Is, Bismarck Archipelago, Solomon Is, N & NE Australia.	NGT. CITES II.	Not recommended

megala , *A s. coultasi, A.s. bismarckii,* *A.s. gurneyi, A s. subcristata*			
Black Baza *Aviceda leuphotes* 4 subspecies *A.l. wolfei, A l. syama, A l. leuphotes,* *A .l. andamanica*	S & C China, NE India, Nepal, SW India, S Burma, W Thailand, South Andaman I.	NGT. CITES II. Uncommon in range.	Not recommended
Grey-headed Kite *Leptodon cayanensis* 2 subspecies *L.c. cayanensis, L c. monachus*	Mexico, S to W Ecuador, Amazonia, Guianas Trinidad, C Brazil, to E Bolivia, N Argentina, Paraguay.	NGT. CITES II. Rare to uncommon in range but not considered threatened.	Not recommended
White-collared Kite *Leptodon forbesi*	NE Brazil.	Insufficiently known, CITES II. Forest habitat has been reduced to 1% of former range. Considered by **Handbook to the Birds of the World vol 2** to be one of the most endangered raptors in world.	Not recommended
Hook-billed Kite *Chondrohierax uncinatus* 3 subspecies *C.u. uncinatus, C.u. mirus, C.u. wilsonii*	W Mexico, extreme S USA, S through C America, Trinidad, Guianas, Brazil to E Peru, E Boliva, Paraguay, N Argentina, Grenada, E Cuba.	NGT. CITES II. Race *wilsonii* CITES I. Race *mirus* of Grenada seriously endangered with only 15-30 individuals.	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Long-tailed Buzzard *Henicopernis longicauda*	New Guinea, W Papuan islands, Aru Is.	NGT. CITES II	Not recommended
New Britain Buzzard *Henicopernis infuscatus*	New Britain.	Indeterminate. CITES II. Seldom seen. Biology unknown	Not recommended
Western Honey-buzzard *Pernis apivorus*	Europe and W Asia, from Spain, France, SE England and E Scandinavia, W Russia, Caucasus, to R Ob in SW Siberia. Winters in Africa.	NGT. CITES II. Stable population	Not recommended
Crested Honey-buzzard *Pernis ptilorhyncus* 6 subspecies *P.p. ruficollis, P.p. philippensis,* *P.p. palawanesis,* *P.p. torquatus,*	S Siberia E to Amurland & Sakhalin, S to Manchuria, Japan, India, Sri Lanka, Burma, SC China, N, E & W Phillipines, Palawan, Malay Peninsula, Sumatra, Borneo, and Java.	NGT. CITES II. Status poorly known.	Not recommended

P.p. ptilorhynchus, P.p. orientalis			
Barred Honey-buzzard *Pernis celebensis* 2 subspecies *P.c. celebensis, P.c. steerei*	Sulawesi, Muna I & Banggai Is, Phillipines.	NGT. CITES II. Status poorly known.	Not recommended
Square-tailed Kite *Lophoictinia isura*	Australia.	NGT. CITES II. Highly specialized species. Declining due to habitat destruction and egg collecting.	Not recommended
Black-breasted Buzzard *Hamirostra melanosternon*	Australia, except S and E.	NGT, CITES II. Declining in SE portion of range due to habitat destruction, egg collecting and poisoning of carcasses it scavenges on.	Not recommended
American Swallow-tailed Kite *Elanoides forficatus* 2 subspecies *E.f. forficatus, E.f. yetapa*	***E.f. forficatus*** - coastal SE USA to N. Mexico. ***E.F. yetapa*** - S Mexico (except Yucatán) S through Central America (excluding El Savador) to E Bolivia, Paraguay and NE Argentina (Misiones).	NGT. CITES II. Relatively common over much of its extensive distribution.	Not recommended
Bat Hawk *Macheiramphus alcinus* 3 subspecies *M.a. alcinus, M.a. papuanus, M.a. anderssoni*	***M.a. alcinus -*** S Burma, W Thailand, Malay Peninsula, Sumatra, Borneo and NC Sulawesi. ***M.a. papuanus*** - E New Guinea. ***M.a. anderssoni*** - Senegambia E to Ethiopia and S to South Africa, Madagascar.	NGT. CITES II. Status difficult to assess due to nocturnal habits and custom of roosting in densely foilaged trees; often considered uncommon to rare.	Not recommended
Pearl Kite *Gampsonyx swainsonii* 3 subspecies *G.s. leonae, G.s. Swainsonii, G.s. magnus*	***G.s. leonae*** - Nicaragua, N Colombia through Venezuela and Trinidad to Guyana and Surinam, and S to R Amazon. ***G.s. swainsonii*** - Brazil S of R Amazon to E Peru, E Bolivia, Paraguay and N Argentina. ***G.s. magnus*** - Coastal W Colombia, Ecuador and N Peru.	NGT. CITES II. Locally distributed and not generally common, but probably benefits from forest destruction, e.g. numerous in partly deforested areas of S Córdoba (NW Columbia).	Not recommended
Common Black-shouldered Kite *Elanus caeruleus* 4 subspecies *E.c. caeruleus, E.c. vociferus, E.c. hypoleucus, E.c. wahgiensis*	***E.c. caeruleus*** - SW Iberian Peninsula, most of Africa and SW Arabia. ***E.c. vociferus*** - Pakistan E to S & E China, Indochina and Malay Peninsula. ***E.c. hypoleucus*** - Sumatra, Java, Borneo, Philippines, Sulawesi, Kalao and Lesser Sundas. ***E.c. wahgiensis*** - New Guinea.	NGT. CITES II. One of the commonest birds of prey throughout its wide range.	Not recommended

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Common Black-shouldered Kite *Elanus caeruleus* 4 subspecies *E.c. caeruleus, E.c. vociferus,* *E.c. hypoleucus,* *E.c. wahgiensis*	***E.c. caeruleus*** - SW Iberian Peninsula, most of Africa and SW Arabia. ***E.c. vociferus*** - Pakistan E to S & E China, Indochina and Malay Peninsula. ***E.c. hypoleucus*** - Sumatra, Java, Borneo, Philippines, Sulawesi, Kalao and Lesser Sundas. ***E.c. wahgiensis*** - New Guinea.	NGT. CITES II. One of the commonest birds of prey throughout its wide range.	Not recommended
Australian Black-shouldered Kite *Elanus axillaris*	Australia.	NGT. CITES II. Common and widespread; has increased in range and numbers in cleared and farmed areas of S Australia in response to creation of habitat and introduction of suitable prey.	Not recommended
White-tailed Kite Elanus leucurus 2 subspecies *E.l. majusculus,* *E.l. leucurus*	***E.l. majusculus*** - W & S USA (from Oregon to C Florida, occasionally to South Carolina) and N Mexico; also most of Central America (race uncertain). ***E.l. leucurus*** - Panama, S through Amazonia to C Argentina (Mendoza and Buenes Aires) and C Chile (Valdivia).	NGT. CITES II. Seems to be increasing over much of range, especially from S Mexico to Panama, with Nicaraguan birds apparently of California origin.	Not recommended
Letter-winged Kite *Elanus scriptus*	Australia, mainly in interior.	NGT. CITES II. Conservation status is of some concern. Generally uncommon; core breeding range and population small and subject to habitat degradation by overgrazing,	Not recommended
African Swallow-tailed Kite *Chelictinia riocourii*	Senegambia E to Ethiopia and Somalia, and S to NE Uganda and NE Kenya, in Kedong Valley.	NGT. CITES II. Little studied; status difficult to assess due to nomadic habits.	Not recommended
Snail Kite *Rostrhamus sociabilis* 3 subspecies *R.s plubeus, R.s. major, R.s. sociabilis*	***R.s plumbeus*** - Florida Everglades (SE USA), Cuba and I of Pines. ***R.s. major*** - East Mexico and Petén (Guatemala). ***R.s. sociabilis*** - Honduras and Nicaragua through Panama to South America, occurring W of Andes in Columbia and Ecuador, and E of Andes throughout to NE Argentina, except Guyana Massif and Brazilian Plateau.	NGT. CITES II. Often abundant in suitable habitat throughout most of range.	Not recommended
Slender-billed Kite *Rostrhamus hamatus*	E Panama, through N & E Colombia, to W, N & SE Venezuela and Surinam; also S	NGT. CITIES II. Poorly known, and requires further study.	Not recommended

	through Amazonian Brazil to E Peru and N Bolivia (Beni); *s.*		
Double-toothed Kite *Harpagus bidentatus* 2 subspecies *H.b. fasciatus, H.b. bidentatus*	***H.b. fasciatus*** - E Mexico (Oaxaca and Veracruz) to W Colombia and W Ecuador. ***H.b. bidentatus*** - E Colombia and E Ecuador through Amazonia to E Bolivia (Beni) and SE Brazil; Trinidad.	NGT. CITES II. No immediate cause for concern; but species will not persist in areas of extensive deforestation.	Not recommended
Rufous-thighed Kite *Harpagus diodon*	Locally in the Guianas, through E Brazil (Amazonia W to R Branco and R Purús) S to E Bolivia (Santa Cruz), Paraguay and N Argentina (Misiones, Jujuy and Salta).	NGT. CITES II. Status very poorly known; generally rare, but perhaps overlooked.	Not recommended
Mississippi Kite *Ictinia mississippiensis*	Southern tier of USA, from Arizona to Florida. Winters in South America, S to N Argentina and Paraguay.	NGT. CITES II. Declined early in century but currently (1993) on increase.	Phase Out
Plumbeous Kite *Ictinia plumbea*	NE Mexico (Tamaulipas) S through Central America to South America, W of Andes S to W Ecuador, E of Andes S to Paraguay and N Argentina.	NGT. CITES II. Relatively common in parts of Brazil and Colombia.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Plumbeous Kite *Ictinia plumbea*	NE Mexico (Tamaulipas) S through Central America to South America, W of Andes S to W Ecuador, E of Andes S to Paraguay and N Argentina.	NGT. CITES II. Relatively common in parts of Brazil and Colombia.	Not recommended
Red Kite *Milvus milvus* 2 subspecies *M.m. milvus, M.m. fasciicauda*	***M.m. milvus*** - S Sweden E to Ukraine and S through C Europe to W & C Mediterranean Basin; Wales; Caucasus; formerly Canary Is. ***M.m. fasciicauda*** - Cape Verde Is.	Insufficiently known. CITES II. Historical decline from 19th century or earlier, leading to current disjunct distribution; basic causes direct persecution and use of poisoned baits.	Not recommended
Black Kite *Milvus migrans* 7 subspecies *M.m. migrans, M.m. lineatus, M.m. formosanus, M.m. govinda, M.m. affinis, M.m. aegyptius, M.m. parasitus*	***M.m. migrans*** - NW Africa and Europe E to C Asia (Tien Shan) and S to Pakistan; winters S to Africa S of Sahara. ***M.m. lineatus*** - Siberia E to Amurland and Japan S to N India, N Burma and N China and Ryukyu Is; winters S to S Iraq, S India and SE Asia. ***M.m. formosanus*** - Taiwan and Hainan (S China). ***M.m. govinda*** - E Pakistan E through India and Sri Lanka to Indochina and Malay Peninsula. ***M.m. affinis*** - Sulawesi and possibly Lesser Sunda Is; E New Guinea and New Britain;	NGT. CITES II. One of comonest of all diurnal raptors, and regionally the commonest, e.g. in Japan and probably in Africa.	Phase-Out

	N Australia S (in E) to Victoria. ***M.m. aegyptius*** - Egypt, SW Arabia and coastal E Africa S to Kenya. ***M.m. parasitus*** - Africa S of Sahara, Cape Verde Is, Comoro Is and Madagascar.		
Whistling Kite *Haliastur sphenurus*	Australia, New Caledonia, and New Guinea (except NW and central mountains).	NGT. CITES II. Common to abundant on coasts, and in tropics where benefits from human activity; locally declining in S through drainage of wetlands and reduction in food supply.	Not recommended
Brahminy Kite *Haliastur indus* 4 subspecies *H.i. indus, H.i. intermedius, H.i. girrenera, H.i. flavirostris*	***H.i. indus*** - Pakistan, India and Sri Lanka through SE Asia to S China. ***H.i. intermedius -*** Malay Peninsula, Greater and Lesser Sundas, Sulawesi and related small islands, Philippines and Sula Is (C Moluccas). ***H.i. girrenera*** - Moluccas, New Guinea, Bismarck Archipelago and Australia. ***H.i. flavirostris*** - Solomon Is.	NGT. CITES II. Has undergone dramatic decline throughout Java. Also declining in non-coastal parts of Thailand.	Not recommended
White-bellied Sea-eagle *Haliaeetus leucogaster*	India and Sri Lanka through SE Asia, Philippines, Wallacea, New Guinea and Bismarcks to Australia and Tasmania.	NGT. CITES II. Generally common, though some localized declines in S Australia through habitat destruction or disturbance to nest sites; also declining in Thailand.	Not recommended
Sanford's Sea-eagle *Haliaeetus sanfordi*	Solomon Is, including Bougainville I and Buka I.	NGT. CITES II. Range and total population size small, biology little known; species formerly considered threatened.	Not recommended
African Fish-eagle *Haliaeetus vocifer*	Senegambia E to Ethiopia and S to South Africa.	NGT. CITES II. Common on many major rivers and lakes, often at high densities for such a large predator, needing only 300-600 m of shore per pair, or 3-15 ha of fishing area; at lower densities along forested rivers.	Phase Out

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5)</u>**	**TAG Recommendation**
Madagascar Fish-eagle *Haliaeetus vociferoides*	Madagascar; originally in all W coast regions, and possibly on E coast, but now confined to NW coast. May also have extended to Mauritius historically.	Endangered. CITES II. Only 45-50 breeding pairs at 48 occupied territories estimated in 1985; some pairs with mean inter-nest distance of 1.48 km. More intensive recent surveys (1992) indicate twice the previous known density in S part of range (21 pairs, as opposed to 10); maximum total may be c. 100 pairs.	Not recommended
Pallas's Fish-eagle	C & S Asia, from Kazakhstan	Rare. CITES II. Formerly much	Not recommended

Haliaeetus leucoryphus	(possibly extinct) to Mongolia and NE China, S to Pakistan, N India, Burma and SC China (Sichuan).	more widespread; in first half of present century, breeding range stretched to Caspian Sea, where species last bred in 1947. Appears to have undergone a general decline, for causes that are not fully understood. Breeding population of former USSR may now be extinct	
White-tailed Sea-eagle *Haliaeetus albicilla*	SW Greenland; W Iceland; N & C Eurasia S to Greece and Turkey, S Caspian Sea, L Balkash and Manchuria; formerly to lower R Yangtze; has bred on Attu I (W Aleutian Is). Winters S to N Mediterranean, Persian Gulf, Pakistan, N India and SE China.	Vulnerable. CITIES I. Marked decline historically from 19th century, with drastic reduction and extinction from extensive areas, including British Is, Faeroes, W Europe and most of Mediterranean.	Phase-out
Bald Eagle *Haliaeetus leucocephalus* 2 subspecies *H.l. washingtoniensis, H.l. leucocephalus*	***H.l. washingtoniensis*** - Aleutian Is, Alaska, Canada and N USA. ***H.l. leucocephalus*** - S USA S to NW Mexico.	NGT. CITES I. Complex situation: N populations not threatened and locally abundant, e.g. in coastal Alaska and British Columbia; but in lower Canada and most of contiguous 48 USA states, numbers reduced and species often considered either threatened or endangered.	Monitor Program
Steller's Sea-eagle *Haliaeetus pelagicus*	Coastal regions along W Bering Sea, S of Paul's Bay (Koryakland), and Sea of Okhotsk; winters S to Ussuriland, Japan and Korea.	Rare. CITES II. Total world population c. 7500 birds, including 5600 adults; majority (1200-1500 pairs) breed in Kamchatka; c. 2200 birds winter on Hokkaido. Main problems include habitat alterations, with large-scale destruction of old forests; shooting by hunters; and natural collapse of eyries.	Red SSP
Lesser Fishing-eagle *Ichthyophaga humilis* 2 subspecies *I.h. plumbea, I.h. humilis*	***I.h. plumbea*** - Kashmir SE through Himalayas of India and Nepal to Burma, N Indochina and Hainan. ***I.h. humilis*** - Malay Peninsula (from Tenasserim) and Sumatra through Borneo to Sulawesi and Banggai Is; recently recorded on Buru (S Moluccas).	NGT. CITES II. Apparently uncommon in Sulawesi, Borneo and Sumatra, but common in reserve of Padang-Sugihan (S Sumatra) in mid-1980s; said to be locally common along forested streams in Burma; probably relatively secure in all of these areas. However, declining in Nepal and India,	Not recommended
Grey-headed Fishing-eagle *Ichthyophaga ichthyaetus*	India, Nepal and Sir Lanka E through Indochina and Malay Peninsula to Greater Sundas, N & E Philippines and Sulawesi.	NGT. CITES II. Species seems to be secure, but locally numbers reduced or species extirpated, primarily through loss of forests.	Not recommended
Palm-nut Vulture *Gypohierax angolensis*	Senegambia E to Kenya coast and S to Angola and NE South Africa.	NGT. CITES II.	Phase Out
Bearded Vulture *Gypaetus barbatus* 2 subspecies *G.b. barbatus, G.b.*	***G.b. barbatus*** - NW Africa and SW Europe through Turkey, Egypt, Middle East, Iran and Afghanistan to Mongolia and C	NGT. CITES II. Currently considered near-threatened. Massive decline in 19th and 20th centuries, particularly in Europe,	Phase Out

meridionalis	& NE China. ***G.b. meridionalis*** - sw Arabia and very locally in E & S Africa.	but also in N and S Africa and W Asia; only small isolated populations survived.	
Egyptian Vulture *Neophron percnopterus* 2 subspecies *N.p. percnopterus, N.p. ginginianus*	***N.p. percnopterus*** - S Europ E to C Asia (E Kazakhstan) and NW India, and S through N Africa, Arabia and Sahel zone to N Tanzania; SW Angola and NW Namibia; also Canary Is, Cape Verde Is and Socotra. ***N.p. ginginianus*** - Nepal and India (except NW).	NGT. CITES II. Has undergone fairly general decline, at least in Europe; population now more stable, and even recovering in some areas.	Phase Out

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Hooded Vulture *Necrosyrtes monachus*	Mauritania E to Ethiopia and S to Namibia and South Africa, except areas of uninterrupted forest or desert.	NGT. CITES II.	Red SSP
African White-backed Vulture *Gyps africanus*	Mauritania E to Ethiopia and S to N and E South Africa.	NGT. CITES II.	Red SSP
Indian White-backed Vulture *Gyps bengalensis*	SE Iran, Afghanistan (perhaps irregularly) and Pakistan through Nepal and India to SC China (Yunnan), Indochina and N Malay Peninsula.	NGT. CITES II.	Phase-out
Long-billed Vulture *Gyps indicus* 2 subspecies *G.i. tenuirostris, G.i. indicus*	***G.i. tenuirostris*** - Lower Himalayas, from Kashmir through Nepal to Assam, and SE into Indochina and N Malay Peninsula. ***G.i. indicus*** - SE Pakistan and India S of R Ganges, exept extreme S.	NGT. CITES II. Fairly common throughout most of range, although usually less numerous than sympatric *G. bengalensis.* Rare and local throughout SE Asia, but reasons for decline unknown; may now be extinct in Thailand.	Not recommended
Ruppell's Griffon *Gyps rueppellii* 2 subspecies *G.r. rueppellii, G.r. erlangeri*	***G.r. rueppellii*** - SW Mauritania E to Sudan, N to Air Massif (NW Niger) and S to Uganda, Kenya and N Tanzania. ***G.r. erlangeria*** - Ethiopia, Eritrea and NW Somalia, possibly ranging to S Arabia.	NGT. CITES II. Less studied than other griffons ; several colonies in Kenya reported to have declined through agricultural encroachment and poisoning. Widely killed for use in traditional medicines.	Yellow SSP
Himalayan Griffon *Gyps himalayensis*	Himalayas from N Pakistan and N India through S Tibet and Nepal to Bhutan, N Assam and C China; also NE through Pamirs to Tien Shan, and possibly also into Tabagatai and Altai.	NGT. CITES II.	Not Recommended
Eurasian Griffon *Gyps fulvus* 2 subspecies *Gyps f. fulvus, Gyps f. fulvescens*	***Gyps f. fulvus*** - NW Africa and Iberian Peninsula E through Balkans, Turkey, Middle East, Arabia and Iran to Pamirs and Altai.	NGT. CITES II.	Phase-out

	Gyps f. fulvescens - Afghanistan, Pakistan and N India E to Assam.		
Cape Griffon *Gyps coprotheres*	Centered on Lesotho and South Africa, extending to Namibia, Botswana, Zimbabwe, S Mozambique and Sqaziland, rarely wandering N to Zambia.	Rare. CITES II. At least 83 colonies and 4400 breeding pairs estimated to remain, but has undergone range retraction and loss of peripheral colonies; declines continue at some major colonies.	Red SSP
Eurasian Black (Cinereous) Vulture *Aegypius monachus*	S Palearctic, from Spain, Balearic Is and Balkans through Turkey, Caucasus, Iran and Afghanistan to S Siberia, Mongolia, N China and extreme N India. Winters S to Sudan, Middle East, Pakistan, NW India and Korea.	Vulnerable. CITIES II. Threatened at world level, partly because nests on trees which are often easily accessible.	Yellow SSP
Lappet-faced Vulture *Torgos tracheliotus* 3 subspecies *T.t. tracheliotus, T.t. nubicus, T.t. negevenis*	***T.t. tracheliotus*** - Extreme SW Morocco; S Mauritania E to Ethiopia and Kenya, S to South Africa. ***T.t. nubicus*** - Egypt and N Sudan. ***T.t. negevenis*** - S Isreal and Arabian Peninsula.	NGT. CITES II. Thinly scattered as a breeding species throughout its wide range, with concentrations of up to c. 40 pairs found only in Namibia, Botswana, Zimbabwe, South Africa, Tanzania and possibly Arabia.	Yellow SSP
White-headed Vulture *Trigonoceps occipitalis*	Senegal E to Ethiopia (including Dahlak Archipelago) and Somalia, then S to Namibia and N South Africa.	NGT. CITES II. Generally uncommon, at 0.25k-1.2 birds/100 km of road counts, with highest values of up to 9.3 birds/100 km from woodland-grassland mosaic in Cameroon and Uganda.	Phase-out
Red-headed Vulture *Sarcogyps calvus*	E Pakistan through India, except extreme S, and Nepal to SC China (S Yunnan), Burma, Indochina and N Malay Peninsula.	NGT. CITES II. Because territorial, never as numerous as other sympatric vulture species.	Phase-out
Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Short-toed Snake-eagle *Ciraetus gallicus*	NW Africa and SW Europe N to Gulf of Finland and E to L Balkash and Iran; Indian Subcontinent; Lesser Sundas (from Lombok to Timor). W populations winter in Sahel zone.	NGT. CITES II. Declined markedly in past, disappearing from most of C & N Europe in 19th century; possibly stable at end of 20th century.	Not recommended
Beaudouin's Snake-eagle *Ciraetus beaudouini*	S Mauritania and Senegambia E to SW Sudan, N Uganda and NW Kenya.	NGT. CITES II. Generally uncommon.	Not recommended
Black-breasted Snake-eagle *Ciraetus pectoralis*	E Sudan and Ethiopia S so South Africa.	NGT. CITES II. Widespread and often locally common.	Not recommended
Brown Snake-eagle Ciraetus cinereus	Senegambia E to N Ethiopia and S to South Africa.	NGT. CITES II. Widespread and conspicuous but often at low density, such as 1 pair/200 km^2.	Not recommended
Southern Banded	Kenya to NE South Africa	NGT. CITES II. Currently	Not recommended

Snake-eagle *Ciraetus fasciolatus*	along the E coast of Africa and further inland along major rivers.	considered near-threatened. Locally common, but habitat often patchy and restricted.	
Western Banded Snake-eagle *Ciraetus cinerascens*	Senegambia E to S Sudan and W Ethiopia, then S to R Zambezi, occurring S to Angola and Namibia in W, and Zimbabwe and Zambia in E.	NGT. CITES II. Locally common but with patchy linear distribution. Vulnerable to degradation of riverine habitat, e.g. in NE Namibia, where only 14 pairs now estimated to occur.	Not recommended
Bateleur Eagle *Terathopius ecaudatus*	Senegambia E to Sudan and Ethiopia then S to Namibia and South Africa.	NGT. CITES II. Widespread and common at densities of 1 pair/140-200 km^2. In Kenya, or 1 pair/30-60 km^2. In Transvaal (estimated total of 600 pairs).	Phase Out
Crested Serpent-eagle *Spilornis cheela* 21 subspecies *S.c. cheela, S.c. melanotis, S.c. spilogaster, S.c. burmanicus, S.c. davisoni, S.c. minimus, S.c. ricketti, S.c. perplexus, S.c. hoya, S.c. rutherfordi, S.c. palawanensis, S.c. pallidus, S.c. richmondi, S.c. natunensis, S.c. malayensis, S.c. batu, S.c. abbotti, S.c. asturinus, S.c. sipora, S.c. bido, S.c. baweanus*	***S.c. cheela*** - N India and Nepal. ***S.c. melanotis*** - India S from Gujarat and Gangetic Plain. ***S.c. spilogaster*** - Sri Lanka. ***S.c. burmanicus*** - Burma, SW China, Thailand and Indochina. ***S.c. davisoni*** - Andaman Is; possibly also Nicobar Is. ***S.c. minimus*** - C Nicobar Is. ***S.c. ricketti*** - N Vietnam and SC & SE China. ***S.c. perplexus*** - S Ryukyu Is. ***S.c. hoya -*** Taiwan. ***S.c rutherfordi*** - Hainan. ***S.c. palawanensis*** - Palawan group (Philippines). ***S.c pallidus*** - Lowlands of N Borneo. ***S.c. richmondi*** - S Borneo. ***S.c. natunensis*** - Natuna Is and Belitung I (off W & SW Borneo). ***S.c. malayensis*** - Malay Peninsula (from S Tenasserim), nearby Anambas Is and N Sumatra. ***S.c. batu*** - S Sumatra and Batu Is (off W Sumatra). ***S.c. abbotti*** - Simeulue I (off W Sumatra). ***S.c. asturinus*** - Nias I (off W Sumatra). ***S.c. sipora*** - Mentawai Is (off W Sumatra). ***S.c. bido*** - Java and Bali. ***S.c. baweanus*** - Bawean I (off N Java).	NGT. CITES II. Throughout extensive range generally widespread and common, sometimes abundant, but locally uncommon.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Great Nicobar	Great Nicobar I (Nicobar Is.).	NGT. CITES II. Seen only twice	Not recommended

Serpent-eagle *Spilornis klossi*		during recent raptor survey, on both occasions perched inside forest. Reported by one source to be common.	
Kinabalu Serpent-eagle *Spilornis kinabaluensis*	Mountains of N Borneo, recorded on Mt Mulu (NE Sarawak), MT Murud (NE Kalimantan) and MT Kinabalu (W Sabah).	Rare. CITES II. Status very poorly known. May be threatened in long-term by clear-felling of forests.	Not recommended
Sulawesi Serpent-eagle *Spilornis rufipectus* 2 subspecies *S.r. rufipectus, S.r. sulaensis*	***S.r. rufipectus*** - Sulawesi, and islands of Salayar, Muna and Buntung, off S Sulawesi. ***S.r. sulaensis*** - Banggai and Sula Is, off E Sulawesi.	NGT. CITES II.	Not recommended
Philippine Serpent-eagle *Spilornis holospilus*	N & E Philippine Is, from Luzon S to Mindanao.	NGT. CITES II.	Not recommended
Andaman Serpent-eagle *Spilornis elgini*	Andaman Is.	Rare. CITES II. Common, sometimes reaching surprisingly high densities; most numerous raptor on Andaman Is. Probably should not be classed as threatened, but rapidly growing human population may encroach on forest habitat in future.	Not recommended
Congo Serpent-eagle *Dryotriorchis spectabilis* 2 subspecies *D.s. spectabilis, D.s. batesi*	***D.s. spectabilis -*** Sierra Leone E to S Nigeria and NW Cameroon. ***D.s. batesi*** - S Cameroon E to W Uganda and S to Gabon and SC Zaire; N Angola.	NGT. CITES II.	Not recommended
Madagascar Serpent-eagle *Eutriorchis astur*	Madagascar, originally along all moist eastern regions, but now confined to NE.	Endangered. CITES II.	Not recommended
Western Marsh-harrier *Circus aeruginosus* 2 subspecies *C.a. aeruginosus, C.a. harterti*	***C.a. aeruginosis*** - Europe and Asia Minor E into C Asia, E to upper R Yenisey and Mongolia; winters in W & S Europe, Africa S of Sahara, and in Indian Subcontinent and Sri Lanka. ***C.a. harterti*** - NW Africa, from Morocco to Tunisia.	NGT. CITES II. Population trends have varied in Europe throughout 20th century, but overall decline in numbers and range.	Not recommended
African Marsh-harrier *Circus ranivorus*	Zaire, Uganda and Kenya S to South Africa; ranges NE to Ethiopia and Somalia.	NGT. CITES II. Common on major wetlands of E and S Africa, especially in Botswana, Zambia and Uganda.	Not recommended
Eastern Marsh-harrier *Circus spilonotus* 2 subspecies *C.s. spilonotus, C.s. spilothorax*	***C.s. spilonotus*** - SE Siberia and Mongolia to Ussuriland, Sakhalin, NE China and N Japan; winters from S Japan and SE Asia and S China to Indonesia and Philippines.	NGT. CITES II. Very little information available about population sizes and trends. Generally rare and patchily distributed in former USSR; uncommon breeder in N Japan.	Not recommended

	C.s. spilothorax - C & E New Guinea.		
Pacific Marsh-harrier *Circus approximans*	S New Guinea (breeding uncertain), Melanesia, Australia, New Zealand and Polynesia E to Tonga. Introduced to Society Is.	NGT. CITES II. Common in suitable habitat, but local declines where wetlands drained. Nests vulnerable to human disturbance.	Not recommended
Madagascar Marsh-harrier *Circus maillardi* 2 subspecies *C.m. maillardi, C.m. macrosceles*	***C.m. maillardi*** - Reunion I. ***C.m. macrosceles*** - Madagascar and Comoro Is.	NGT. CITES II. Currently considered near-threatened. Widely distributed on Madagascar, both coastally and inland, but nowhere common and not present on all wetlands.	Not recommended
Long-winged Harrier *Circus buffoni*	SW Columbia to the Guianas, Trinidad and Tobago, and NE Brazil (Pará and Maranhão), then S to E Bolivia, N & C Argentina and C Chile.	NGT. CITES II. Widespread, but apparently rather local. Very poorly known.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Spotted Harrier *Circus assimilis*	Australia; Sulawesi and Sula Is (C Moluccas); also recorded on Sumba and Timor (Lesser Sundas), but probably migrants.	NGT. CITES II. Generally uncommon but widespread; may have benefited locally in S by creation of habitat, and increase in native and introduced prey.	Not recommended
Black Harrier *Circus maurus*	S South Africa, ranging N to Transvaal, Lesotho, S Namibia and S Botswana.	NGT. CITES II. Currently considered near-threatened. Widespread and locally common within restricted breeding habitat.	Not recommended
Northern (Hen) Harrier *Circus cyaneus* 2 subspecies *C.c cyaneus, C.c. hudsonius*	***C.c. cyaneus*** - Eurpoe and N Asia E to Kamchatka ; winters from Europe and NW Africa through S Asia to SE China and Japan. ***C.c. hudsonius*** - North America, S to NW Mexico and SE Virginia (USA) ; winters S to N South America.	NGT. CITES II. Population trends vary regionally, but generally seems to be in decline.	Phase Out
Cinereous Harrier *Circus cinereus*	Columbia and Ecuador (above treeline) S through Peru, Bolivia and Paraguay to extreme S Brazil, then S to Tierra del Fuego and Falkland Is.	NGT. CITES II. Overall in no danger; in S portions of range can be fairly common, in some areas second most abundant raptor after Chimango Caracara (*Milvago chimango*).	Not recommended
Pallid Harrier *Circus macrourus*	Ukraine and SW Russia E to L Balkash region, NW China. Winters mainly in Africa S of Sahara, and from Pakistan, India and Sri Lanka E to S China, and irregularly to E China.	NGT. CITES II. Drastically declining, particularly in Europe.	Not recommended
Pied Harrier *Circus*	S Siberia (L Baikal) and Mongolia E to Amurland,	NGT. CITES II. Relatively small range, apparently with limited	Not recommended

melanoleucos	Manchuria and N Korea; has bred in N Burma and NE India (Assam). Winters from India and Sri Lanka to S China, Borneo and Philippines.	numbers; population size and trends poorly known; total of 14,534 birds counted migrating over Beidaihe (NE China) in autumn 1986.	
Montagu's Harrier *Circus pygargus*	NW Africa and S & C Europe E through Caspian lowlands to Kazakhstan and upper R Yenisey. Winters in Africa S of Sahara and Indian Subcontinent S to Sri Lanka.	NGT. CITES II. In decline, mainly due to transformation of natural or semi-natural habitats and high rate of breeding failure in agricultural areas, in turn caused by nestlings dying following harvesting of crops.	Not recommended
African Harrier-hawk *Polyboroides typus* 2 subspecies *P.t. pectoralis, P.t. typus*	***P.t. pectoralis*** - Senegambia E to W Sudan, N to Air Mountains (NW Niger) and S to Zaire. ***P.t. typus*** - E Sudan to Eritrea and S to Angola and South Africa.	NGT. CITES II. One of commonest birds of prey in forests and woodlands of W and C Africa, especially where oil and *Borassus* palms abundant.	Not recommended
Madagascar Harrier-hawk *Polyboroides radiatus*	Madagascar.	NGT. CITES II. One of the five commonest raptors on Madagascar.	Not recommended
Lizard Buzzard *Kaupifalco monogrammicus* 2 subspecies *K.m. monogrammicus, K.m. meridionalis*	***K.m. monogrammicus*** - Senegambia E to Ethiopia and S to Uganda and Kenya. ***K.m. meridionalis*** - S Kenya S to N South Africa and W to Angola and N Namibia.	NGT. CITES II. Vulnerable to cutting of woodland and burning or grazing of grass cover,	Not recommended
Dark Chanting-goshawk *Melierax metabates* 5 subspecies *M.m. theresae, M.m. neumanni, M.m. ignoscens, M.m. metabates, M.m. mechowi*	***M.m. theresae*** - SW Morocco. ***M.m. neumanni*** - Mali E to N Sudan. ***M.m. ignoscens*** - SW Arabian Peninsula. ***M.m. metabates*** - Senegambia E to Ethiopia and S to NE Zaire and N Tanzania. ***M.m. mechowi*** - Angola E to S Tanzania and S to N Namibia and NE South Africa.	NGT. CITES II.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Eastern Chanting-goshawk *Melierax poliopterus*	SE Ethiopia and Somalia S to E Uganda and N Tanzania	NGT. CITES II.	Not recommended
Pale Chanting-goshawk *Melierax canorus* 2 subspecies *M.c. argentior, M.c. canorus*	***M.c. argentior*** - S Angola S and E through Namibia, Botswana and Zimbabwe to NE South Africa and Transvaal and NW Orange Free State. ***M.c. canorus*** - S South Africa, in Cape Province, SE Orange Free State and (formerly) S	NGT. CITES II.	Not recommended

	Natal.		
Gabar Goshawk *Micronisus gabar* 2 subspecies *M.g. aequatorius, M.g. gabar*	***M.g. aequatorius*** - Ethiopian highlands S to Zaire, Zambia and N Mozambique. ***M.g. gabar*** - S Angola, Zambia and Mozambique S to South Africa.	NGT. CITES II.	Not recommended
Grey-bellied Goshawk *Accipiter poliogaster*	E of Andes from Colombia and NE Ecuador, S Venezuela and the Guianas S through Brazil (except NE), E Peru, Bolivia and Paraguay to N Argentina (Misiones.	NGT. CITES II. Currently considered near-threatened. Very little information available. Generally seems to be rare, but wide distribution suggests no immediate overall threat.	Not recommended
Crested Goshawk *Accipiter trivirgatus* 11 subspecies *A.t. layardi, A.t. peninsulae, A.t. indicus, A.t. formosae, A.t. trivigatus, A.t. niasensis, A.t. javanicus, A.t. microstictus, A.t. palawanus, A.t. extimus. A.t. castroi*	***A.t. layardi*** - Sri Lanka. ***A.t. peninsulae*** - SW India. ***A.t. indicus*** - NC, NE & E India and Nepal to S China, including Hainan, and S to Indochina and Malay Peninsula. ***A.t. formosae*** - Taiwan. ***A.t. trivigatus*** - Sumatra. ***A.t. niasensis*** - Nias I (off W Sumatra). ***A.t. javanicus*** - Java; recently recorded on Bali. ***A.t. microstictus*** - Borneo. ***A.t. palawanus*** - Palawan, Calamianes (SW Philippines); may also be race of Natuna Is (off W Borneo). ***A.t. extimus*** - SE Philippines. ***A.t. castroi*** - Polillo Is, off E Luzon (N Philippines).	NGT. CITES II. Apparently uncommon to fairly common throughout extensive range; possibly commoner than thought simply not detected because of unobtrusive habits and preference for forest interiors.	Not recommended
Sulawesi Goshawk *Accipiter griseiceps*	Sulawesi and off-lying Togian Is, Muna and Butung.	NGT. CITES II. Generally reckoned to be uncommmon, e.g. in Dumoga-Bone National Park (N Sulawesi); may actually be commoner than thought but infrequently observed due to unobtrusive behaviour.	Not recommended
Red-chested Goshawk *Accipiter toussenelii* 4 subspecies *A.t. macroscelides, A.t. toussenelii, A.t. canescens, A.t. lopezi*	***A.t. macroscelides*** - Senegambia to W Cameroon in rain forest. ***A.t. toussenelii*** - S Cameroon to Gabon, in lower Zaire River basin. ***A.t. canescens -*** Upper Zaire River basin. ***A.t. lopezi*** - Bioko I (Fernando Po).	NGT. CITES II.	Not recommended

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
African Goshawk *Accipiter tachiro* 5 subspecies *A.t. unduliventer, A.t. croizati, A.t. sparsimfasciatus, A.t. pembaensis, A.t. tachiro,*	***A.t. undulventer*** - Ethiopian highlands. ***A.t. croizati*** - SW Ethiopia. ***A.t. sparsimfasciatus*** **- Somalia, through E Africa, Zanzibar and SE Zaire** to N Angola, N Zambia, N Malawi and N Mozambique. ***A.t. pembaensis*** **-** Pemba I (Tanzania). ***A.t. tachiro*** - S Angola, S Zambia, S Malawi and S Moazmbique S to South Africa.	NGT. CITES II.	Not recommended
Chestnut-flanked Sparrowhawk *Accipiter castanilius*	Nigeria E to Zaire River basis. Purported presence in Upper Guinea forests W of Nigeria requires confirmation.	NGT. CITES II. Secretive, but thought to be common in larger tracts of pristine forest, of which considerable areas remain. Vulnerable to deforestation, although will enter clearings to hunt; numbers may be much reduced in parts of range.	Not recommended
Shikra *Accipiter badius* 6 subspecies *A.b. cenchroides, A.b. dussumieri, A.b. badius, A.b. poliopsis, A.b. sphenurus, A.b. polyzonoides*	***A.b. cenchroides*** - Azerbaijan E to Kazakhstan and Iran E to NW India, migrating further S in winter. ***A.b. dussumieri*** - C India and Bangladesh. ***A.b. badius*** - SW India and Sri Lanka. ***A.b. poliopsis*** - NE India E to S China, S to Thailand and Vietnam. ***A.b. sphenurus*** - Senegambia E to SW Arabia, S to N Zaire and N Tanzania. ***A.b. polyzonoides*** - S Zaire and S Tanzania to N South Africa.	NGT. CITES II.	Not recommended
Nicobar Sparrowhawk *Accipiter butleri* 2 subspecies *A.b. butleri, A.b. obsoletus*	***A.b. butleri*** - Car Nicobar I (N Nicobar Is). ***A.b. obsoletus*** - Katchall I and possibly Camorta I (C Nicobar Is).	NGT. CITES II. Variously reported as not uncommon and fairly common, but not encountered during recent raptor surveys on Car Nicobar.	Not recommended
Levant Sparrowhawk *Accipiter brevipes*	SE Europe, SW Ukraine and S Russia E to W Kazakhstan; more locally in Turkey, Caucasus and Iran. Thought to winter mainly in E Sahel zone of sub-Saharan Africa.	NGT. CITES II. Size and trends of populations insufficiently known, but species less rare than was thought before 1980's.	Not recommended
Chinese Goshawk *Accipiter soloensis*	S Ussuriland and Korea; C & E China and Taiwan. Winters from extreme SE China and Hainan, S through Indochina, Philippines and Indonesia to W	NGT. CITES II.	Not recommended

	New Guinea and occasionally W Micronesia.		
Frances's Sparrowhawk *Accipiter francesii* 4 subspecies *A.f. francesii, A.f. griveaudi, A.f. pusillus, A.f. brutus*	***A.f. francesii* - Madagascar.** ***A.f. griveaudi*** - Ngadzidja (Grand Comoro), Comoro Is. ***A.f. pusillus*** - Ndzuani (Anjouan), Comoro Is. ***A.f. brutus*** - Maore (Mayotte), Comoro Is.	NGT. CITES II. The commonest *Accipiter* on Madagascar, but uncommon in the arid S.	Not recommended
Spot-tailed Goshawk *Accipiter trinotatus*	Sulawesi and off-lying islands of Talisei, Muna and Butung.	NGT. CITES II.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5)</u>**	**TAG Recommendation**
Variable Goshawk *Accipiter novaehollandiae* 23 subspecies *A.n. sylvestris, A.n. polionotus, A.n. albiventris, A.n. Obiensis, A.n. griseogularis, A.n. mortyi, A.n. hiogaster, A.n. pallidiceps, A.n. leucosomus, A.n. pallidimas, A.n. manusi, A.n. bougainvillei, A.n. rufoschistaceus, A.n. rubianae, A.n. pulchellus, A.n. malaitae, A.n. misulae, A.n. misoriensis, A.n. dampieri, A.n. lavongai, A.n. lihirensis, A.n. matthiae, A.n. novaehollandiae*	***A.n. sylvestris*** - Lesser Sundas. ***A.n. polionotis*** - Banda I (Moluccas), Tanimbar Is. ***A.n. albiventris*** - Tayandu I (Moluccas), Kai Is. ***A.n. obiensis*** - Obi (C Moluccas). ***A.n. griseogularis*** - N Moluccas. ***A.n. mortyi*** - Morotai (N Moluccas). ***A.n. hiogaster*** - S Moluccas. ***A.n. pallidiceps*** - Buru (S Moluccas). ***A.n. leucosomus*** - New Guinea. ***A.n. pallidimas*** - D'Entrecasteaux Is (New Guinea). ***A.n. manusi*** - Admiralty Is. ***A.n. bougainvillei*** - Bougainville (N Solomons). ***A.n. rufoschistaceus*** - Choiseul, Santa Isabel, Florida Is (C Solomon Is). ***A.n. rubianae*** - C Solomon Is. ***A.n. pulchellus*** - Guadalcanal (SW Solomon Is). ***A.n. malaitae*** - Malaita (SE Solomon Is). ***A.n. misulae*** - Louisiade Is (New Guinea). ***A.n. misoriensis*** - Biak I. ***A.n. dampieri*** - New Britain. ***A.n. lavongai*** - New Hanover and New Ireland (Bismarck Archipelago). ***A.n. lihirensis*** - Lihir and Tanga Is.	NGT. CITES II. Uncommon in S and NW Australia, but generally common in tropics.	Not recommended

	A.n. matthiae - St Matthias I (Bismarck Archipelago). ***A.n. novaehollandia*** - N & E Australia and Tasmania.		
Australasian Goshawk *Accipiter fasciatus* 11 subspecies *A.f. natalis, A.f. tjendanae, A.f. wallacii, A.f. stresemanni, A.f. hellmayri, A.f. savu, A.f. polycryptus, A.f. dogwa, A.f. didimus, A.f. fasciatus, A.f. vigilax*	***A.f. natalis*** - Christmas I (Indian Ocean). ***A.f. tjendanae*** - Sumba (Lesser Sundas). ***A.f. wallacii*** - Lesser Sundas, from Lombok E to Babar. ***A.f. stresemanni*** - Islets between Sulawesi and Lesser Sundas. ***A.f. hellmayri*** - Timor, Alor, Roti (Lesser Sundas). ***A.f. savu*** - Sawu (Lesser Sundas). ***A.f. polycryptus*** - E New Guinea. ***A.f. dogwa*** - S New Guinea. ***A.f. didimus*** - N Australia; Buru (S Moluccas). ***A.f. fasciatus*** - Timor (Lesser Sundas); Australia and Tasmania; Rennell and Bellona Is (Solomons). ***A.f. vigilax*** - New Caledonia, Loyalty Is, Vanuatu.	NGT. CITES II. Common and widespread; local declines in S Australia where habitat clearance extensive, but species has benefited from introduction of rabbit; preys on introduced birds.	Not recommended
Black-mantled Goshawk Accipiter melanochlamys 2 subspecies *A.m. melanochlamys, A.m. schistacinus*	***A.m melanochlamys*** - Vogelkop (W New Guinea). ***A.m. schistacinus*** - Montane C & E New Guinea.	NGT. CITES II. Widespread in all montane areas of mainland New Guinea but lives in remote, rugged and densely forested areas and is seldom encountered by ornithologists.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Pied Goshawk *Accipiter albogularis* 5 subspecies *A.a. eichhorni, A.a. woodfordi, A.a. albogularis, A.a. gilvus, A.a. sharpei*	***A.a. eichhorni*** - Feni Is (Bismarcks). ***A.a. woodfordi*** - N, E & S Solomons. ***A.a. albogularis*** - San Cristobal, Santa Ana (Solomons). ***A.a. sharpei -*** Santa Cruz Is.	NGT. CITES II. Appears to be common, at any rate in parts of range, but biology and population trends virtually unknown.	Not recommended
New Caledonia Sparrowhawk *Accipiter haplochrous*	New Caledonia.	NGT. CITES II. Restricted distribution, but widespread throughout main island.	Not recommended
Fiji Goshawk *Accipiter rufitorques*	Fiji Is.	NGT. CITES II.	Not recommended
Moluccan	N Moluccas, on Morotai,	NGT. CITES II. Apparently	Not recommended

Goshawk *Accipiter henicogrammus*	Halmahera, Bacan and perhaps Tenate.	uncommon, but unobtrusive; possibly commoner than thought.	
Slaty-backed Goshawk *Accipiter luteoschistaceus*	New Britain.	NGT. CITES II. Restricted distribution and presumably low total population size. Apparently scarce, and seldom seen by ornighologists; biology unknown.	Not recommended
Imitator Sparrowhawk *Accipter imitator*	Bougainville, Choiseul and Santa Isabel, in N & C Solomon Is.	Rare. CITES II. Restricted distribution, and presumably low total population size; habitat subject to deforestation in lowlands. Seldom encountered by ornithologists, and biology unknown.	Not recommended
Grey-headed Goshawk *Accipiter poliocephalus*	W Papuan Is and Aru Is through New Guinea to Fergusson I (D'Entrecasteaux Is) and Misima I and Tagula I (Louisiade Archipelago).	NGT. CITES II.	Not recommended
New Britain Goshawk *Accipiter princeps*	New Britain.	NGT. CITES II. Currently considered near-threatened. Scarce, and seldom encountered by ornithologists; biology unknown.	Not recommended
Tiny Hawk *Accipiter superciliosus* 2 subspecies *A.s. fontanieri, A.s. superciliosus*	***A.s. fontanieri*** - Nicaragua S to W Columbia and W Ecuador. ***A.s. superciliosus*** - E of Andes, from Colombia E through Venezuela (except NW) to the Guianas, and S through Ecuador, E Peru, Bolivia (Beni, Santa Cruz) and Brazil to Paraguay and N Argentina (Misiones).	NGT. CITES II. Status very poorly known, but large range and tendency to use second growth forest suggest species in no immediate danger.	Not recommended
Semi-collared Hawk *Accipiter collaris*	SW Venezuela (Mérida, Táchira) S, on W & E slopes of Andes, through Colombia to Ecuador; recent range extension of 1500 km to S Peru.	NGT. CITES II. Currently considered near-threatened. Very little known; thorough surveys needed.	Not recommended
Red-thighed Sparrowhawk *Accipiter erythropus* 2 subspecies *A.e. erythropus, A.e. zenkeri*	***A.e. erythropus*** - Senegambia to Nigeria. ***A.e. zenkeri*** - Cameroon E to W Uganda and S to N Angola and C Zaire.	NGT. CITES II. Small size suggests may occur at high density in pristine forest, large tracts of which remain in C Africa.	Not recommended
African Little Sparrowhawk *Accipiter minullus*	S Sudan and Ethiopia S to South Africa and W to Angola and Namibia.	NGT. CITES II.	Not recommended
Japanese Sparrowhawk *Accipiter gularis* 3 subspecies *A.g. sibiricus, A.g. gularis, A.g. iwasakii*	***A.g. sibiricus*** - Upper R Ob and Mongolia E to middle R Lena, E China and Taiwan; presumably winters from Andaman and Nicobar Is E to S China and Greater Sundas. ***A.g. gularis*** - Sakhalin, S Kuril Is and Japan; winters S to	NGT. CITES II. Status and trends of populations very poorly known, with virtually no figures available.	Not recommended

	Philippines, Greater Sundas, N Sulawesi and Timor. ***A.g. iwasakii*** - S Ryukyu Is (Iriomote, Ishigaki).		

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Besra *Accipiter virgatus* 11 subspecies *A.v. affinis, A.v. fuscipectus, A.v. besra, A.v. abdulali, A.v. nisoides, A.v. confusus, A.v. quagga, A.v. rufotibialis, A.v. vanbemmeli, A.v. virgatus, A.v. quinquefasciatus*	***A.v. affinis*** - N India and Nepal E to C & S China, and Indochina. ***A.v. fuscipectus*** - Mountains of Taiwan. ***A.v. besra*** - SW India and Sri Lanka, probably also SE India. ***A.v. abdulali*** - Andaman Is. and possibly Nicobar Is. ***A.v. nisoides*** - Burma and Thailand; possibly also Malay Peninsula. ***A.v. confusus*** - Luzon, Mindoro, Negros and Catanduanes (N & E Philippines). ***A.v. quagga*** - Cebu, Bohol, Leyte, Samar, Siquijor and Mindanao (SE Philippines). ***A.v. rufotibialis*** - N Borneo. ***A.v. vanbemmeli -*** Sumatra. ***A.v. virgatus*** - Java and Bali. ***A.v. quinquefasciatus*** - Flores (Lesser Sundas).	NGT. CITES II. Uncommon to common throughout extensive range. Main threat is deforestation, e.g. in much of lowland India, Philippines and Java.	Not recommended
Sulawesi Dwarf Sparrowhawk *Accipiter nanus*	Mountains of Sulawesi, except SW.	Rare. CITES II. Apparently uncommon to rare, but status difficult to ascertain because of unobtrusive behaviour. Not known to be directly threatened at present, but loss of forest habitat likely to have negative impact.	Not recommended
Rufous-necked Sparrowhawk *Accipiter erythrauchen* 2 subspecies *A.e. erythrauchen, A.e. ceramensis*	***A.e. erythrauchen*** - Mortrotai, Halmahera, Bacan and Obi (N Moluccas). ***A.e. ceramensis*** - Buru, Ambon and Seram (S Moluccas).	NGT. CITES II. Uncommon, but unobtrusive and easily overlooked. Status very poorly known; most likely threat is loss of forest habitat.	Not recommended
Collared Sparrowhawk *Accipiter cirrocephalus* 3 subspecies *A.c. papuanus, A.c. rosselianus, A.c. cirrocephalus*	***A.c. papuanus*** - New Guinea, W Papuan Is, Aur Is. ***A.c. rosselianus*** - Rossel I (Louisiade Archipelago). ***A.c. cirrocephalus*** - Australia, Tasmania.	NGT. CITES II. Uncommon, but widespread; secretive and probably under-recorded.	Not recommended
New Britain Sparrowhawk Accipiter	New Britain.	Rare. CITES II. Scarce, and seldom encountered by ornithologists; population trend and biology	Not recommended

brachyurus		unknown.	
Vinous-breasted Sparrowhawk *Accipiter rhodogaster* 3 subspecies *A.r. rhodogaster, A.r. butonensis, A.r. sulaensis*	***A.r. rhodogaster*** - Sulawesi. ***A.r. butonensis*** - Muna and Butung (off SE Sulawesi). ***A.r. sulaensis*** - Banggai and Sula Is.	NGT. CITES II. Widespread and apparently uncommon; perhaps commoner than thought, but overlooked because of unobtrusive habits.	Not recommended
Madagascar Sparrowhawk *Accipiter madagascariensis*	Madagascar.	NGT. CITES II. Currently considered near-threatened. Status poorly known. Uncommon in all areas and rare on deforested central plateau.	Not recommended
Ovambo Sparrowhawk *Accipiter ovampensis*	Senegambia, Sierra Leone and Chana E to Ethiopia and S to Angola, N Namibia, N Botswana and N South Africa.	NGT. CITES II.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Eurasian Sparrowhawk *Accipiter nisus* 6 subspecies *A.n. nisus, A.n. nisosimilis, A.n. melaschistos, A.n. wolterstorffi, A.n. granti, A.n. punicus*	***A.n. nisus*** - Europe and Asia Minor E to W Siberia; winters S to NE Africa and Middle East. ***A.n. nisosimilis*** - C & E Asia; winters S to India, Sri Lanka and Indochina. ***A.n. melaschistos*** - Himalayas and mountains of C Asia. ***A.n. wolterstorffi*** - Corsica and Sardinia. ***A.n. granti*** - Madeira and Canary Is. ***A.n. punicus*** - NW Africa, from Morocco to Tunisia.	NGT. CITES II. Declined drastically in Europe during 1950's and 1960's due to generalized use of organochlorine pesticides, which killed adults and lowered breeding success.	Phase Out
Rufous-breasted Sparrowhawk *Accipiter rufiventris* 2 subspecies *A.r. perspicillaris, A.r. rufiventris*	***A.r. perspicillaris*** - Ethiopian highlands. ***A.r. rufiventris*** - Kenya and E Zaire S to South Africa.	NGT. CITES II.	Not recommended
Sharp-shinned Hawk *Accipiter striatus* 7 subspecies *A.s. perobscurus, A.s. velox, A.s. suttoni, A.s. madrensis, A.s. striatus, A.s. fringilloids, A.s. venator*	***A.s. perobscurus*** - Queen Charlotte Is; possibly also mainland coast of British Columbia. ***A.s. velox*** - Alaska and Canada S to California, Arizona, New Mexico and Alabama (USA); winters S to Panama. ***A.s. suttoni*** - Extreme S New Mexico (USA) S locally to Veracruz (Mexico).	NGT. CITES II. Race *velox* affected by organochlorine chemicals in 1960's and 1970's; some general declines. Habitat alteration, especially removal of forest, continues to affect populations, although species capable of adapting to urban areas.	Phase Out

	A.s. madrensis - Guerrero and perhaps W Oaxaca (S Mexico). ***A.s. striatus*** - Hispaniola, in both Haiti and Dominican Republic. ***A.s. fringilloides*** - Cuba. ***A.s. venator*** - Puerto Rico.		
White-breasted Hawk *Accipiter chionogaster*	Highlands of Central America, from S Mexico (Chiapas, Oaxaca) through Guatemala, Honduras and El Salvador to NC Nicaragua.	NGT. CITES II. Status uncertain; relatively restricted range and extensive deforestation within this range suggest that careful monitoring is merited.	Not recommended
Plain-breasted Hawk *Accipiter ventralis*	Hills and mountains from N & SE Venezuela and Colombia through Ecuador and Peru to W Bolivia (Cochambamba).	NGT. CITES II.	Not recommended
Rufous-thighed Hawk *Accipiter erythronemius*	S Brazil (S from Mato Grosso and Bahia) to Uruguay, and SE Bolivia (Santa Cruz to Tarija) through Chaco of Paraguay to N Argentina (La Rioja & Córdoba).	NGT. CITES II. In general fairly common, but locally threatened where extensive monocultural agriculture removes all stands of woodland; otherwise probably fairly adaptable and no apparent grounds for conern.	Not recommended
Cooper's Hawk *Accipiter cooperii*	USA and S Canada. Winters from N USA to C America, regularly as far S as Honduras, occasionally to Colombia.	NGT. CITES II.	Phase Out
Gundlach's Hawk *Accipiter gundlachi* 2 subspecies *A.g. gundlachi, A.g. wileyi*	*E,* W & C Cuba. .	Vulnerable/Rare. CITES II. Total numbers estimated at c. 150-200 pairs, mostly in E Cuba, but with three additional populations in W, in provinces of Las Villas, Matanzas (Zapata Swamp) and Pinar.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Bicoloured Hawk *Accipiter bicolor* 4 subspecies *A.b. fidens, A.b. bicolor, A.b. pileatus, A.b. guttifer*	***A.b. fidens*** - S Mexico, N of Yucatán, in Oaxaca and Veracruz. ***A.b. bicolor*** - S Mexico (Yucatán) to Amazonia and the Guianas, S to E Bolivia, and W of Andes S to NW Peru (Lambayeque). ***A.b. pileatus*** - Brazil S of Amazonia (E Mato Grosso to S Maranhão and Ceará) and S to NE Argentina (Misiones). ***A.b. guttifer*** - Brazil (W Mato Grosso) and Bolivia through Chaco of Paraguay to N Argentina.	NGT. CITES II. Widespread, but generally rare.	Not recommended
Chilean Hawk *Accipiter chilensis*	Andes of C Chile (O'Higgins) and adjacent Argentina S to Tierra del Fuego and Staten I.	NGT. CITES II. Status very poorly known. Reportedly declining in much of Chile, but said to be little	Not recommended

	Winters N to NW Argentina (Catamarca).	influenced by modest levels of forest clearing.	
Black Sparrowhawk *Accipiter melanoleucus* 2 subspecies *A.m. temminckii, A.m. melanoleucus*	***A.m. temminckii*** - Senegambia E to Gabon, Congo and Central African Republic. ***A.m. melanoleucus*** - E Sudan and N & W Ethiopia; Gabon and Zaire E to Kenya and S to Angola and South Africa; Pemba and Zanzibar.	NGT. CITES II.	Not recommended
Henst's Goshawk *Accipter henstii*	Madagascar.	NGT. CITES II. Currently considered near threatened.	Not recommended
Northern Goshawk *Accipiter gentilis* 8 subspecies *A.g. gentilis, A.g. arrigonii, A.g. buteoides, A.g. albidus, A.g. schvedowi, A.g. fujiyamae, A.g. atricapillus, A.g. laingi*	***A.g. gentilis*** - Europe and extreme NW Africa. ***A.g. arrigonii*** - Corsica and Sardinia. ***A.g. buteoides*** - Extreme N Eurasia, from N Sweden E to R Lena; winters S to C Europe and C Asia. ***A.g. albidus*** - NE Siberia to Kamchatka. ***A.g. schvedowi*** - Asia, from Urals to Amurland, Sakhalin and Kuril Is, S to C China; winters S to Himalayas and N Indochina. ***A.g. fujiyamae*** - Japan. ***A.g. atricapillus*** - North America, S to Tennessee and S Arizona (USA) and Jalisco (W Mexico). ***A.g. laingi*** - Queen Charlotte Is and Vancouver I, British Columbia (W Canada).	NGT. CITES II. Significant decline in Europe during 19th century and 20th, mainly due to persecution and deforestation.	Phase Out
Meyer's Goshawk *Accipiter meyerianus*	Halmahera and Seram (Moluccas) through N & E New Guinea to New Britain and Solomon Is (on Kolombangara and Guadalcanal).	NGT. CITES II. Scarce, and seldom encountered by ornithologists; biology poorly known.	Not recommended
Chestnut-shouldered Goshawk *Erythrotriorchis buergersi*	N & E New Guinea.	NGT. CITES II. Scarce, and seldom encountered by ornithologists; biology unknown.	Not recommended
Red Goshawk Erythrotriorchis radiatus	N & E Australia, from Kimberleys round to N New South Wales.	Vulnerable. CITES II. Scarce, with specialized requirements, and locally restricted within continental range; declining, with contraction of breeding range, in E Australia through habitat loss.	Not recommended

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Doria's Hawk *Megatriorchis doriae*	New Guinea; also recorded on Batanta I, off NW New Guinea.	NGT. CITES II. Scarce, and seldom encountered by ornithologists; biology unknown.	Not recommended
Long-tailed Hawk *Urotriorchis macrourus*	Liberia E to W Uganda and S to SW & C Zaire.	NGT. CITES II. Secretive but widely recorded from primary forest; restricted to large tracts of dense forest, althought readily occurs at edge of clearings. Much affected by deforestation, due to intolerance of secondary habitats, and has probably decreased considerably throughout much of W Africa.	Not recommended
Grasshopper Buzzard *Butastur rufipennis*	Senegambia E to Ethiopia, migrating S to Sierra Leone, Cameroon, NE Zaire, Kenya and N Tanzania.	NGT. CITES II.	Not recommended
White-eyed Buzzard *Butastur teesa*	SE Iran, Afghanistan and Pakistan through India and Nepal to Burma (S to Tenaserim).	NGT. CITES II.	Not recommended
Rufous-winged Buzzard *Butastur liventer*	Burma and SC China (SW Yunnan) S to Indochina and N Malay Peninsula; Java; Sulawesi. Reported occurrence in SE Borneo doubtful; old record of questionable validity from Timor.	NGT. CITES II. Throughout most of range fairly common to uncommon, but local; rare in Yunnan (SC China) and Java. Not encountered in Java during recent raptor surveys.	Not recommended
Grey-faced Buzzard *Butastur indicus*	NE China to Amurland and Ussuriland, Japan and Izu Is. Winters from S & SE China and Taiwan through Indochina and Malay Peninsula to Greater Sundas, Philippines, Sulawesi and islands off NW New Guinea.	NGT. CITES II. Size and trends of populations very poorly known.	Not recommended
Crane Hawk *Geranospiza caerulescens* 6 subspecies *G.c. livens, G.c. Nigra, G.c. balzarensis, G.c. caerulescens, G.c. gracilis, G.c. flexipes*	***G.c. livens*** - NW Mexico. ***G.c. Nigra*** - N Mexico (Sinaloa and Tamaulipas) S to zone of Panama Canal. ***G.c. balzarensis*** - Panama E of canal zone on Pacific slope to W Colombia, W Ecuador and NW Peru (Lambayeque). ***G.c. caerulescens*** - E slope of Colombia and Ecuador to the Guianas and Amazonian Peru and Brazil. ***G.c. gracilis*** - NE Brazil, from Maranhão, Ceará and Piauí to C Goiás and Bahia. ***G.c. flexipes*** - S Brazil (Minas Gerais, S Goiás and Mato Grosso) and Bolivia through	NGT. CITES II. Generally not common, but extensive geograhical range and broad habitat tolerance suggest little grounds for immediate concern. In Colombia, widespread but local and rarely common.	Not recommended

	Chaco of Paraguay, to NC Argentina (S to La Rioja, Córdoba and Buenos Aires) and Uruguay.		
Plumbeous Hawk *Leucopternis plumbea*	E. Panama through W Colombia and W Ecuador to extreme NW Peru.	NGT. CITES II. Currently considered near-threatened. Status very poorly known, but in general rare to uncommon. May have been extirpated from W Panama; apparently rare in Colombia.	Not recommended
Slate-coloured Hawk *Leucopternis schistacea*	Amazonia, from SE Colombia and SW Venezuela S through E Ecuador and E Peru to N & E Bolivia, and E to E French Guiana and CN Brazil.	NGT. CITES II. Generally fairly common. Status uncertain, but extensive range suggests there is no need for immediate concern ; surveys required to assess situation more definitely. Biology very poorly known.	Not recommended
Barred Hawk *Leucopternis princeps*	Costa Rica and Panama, and locally into W Colombia and N Ecuador on both sides of the Andes.	NGT. CITES II. Too little known to permit accurate assessment of status, but propensity to use forest edge suggests it is not a species of imminent concern.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Black-faced Hawk *Leucopternis melanops*	The Guianas and Amazonia N of Amazon R to E Colombia and E Ecuador. Specimens from R Tapajós (S of Amazon) may refer to *L. kuhli.*	NGT. CITES II. Status very poorly known. Apparently rare throughout, but very secretive and often overlooked; most of forest in extensive range persists, so probably not a species of immediate concern.	Not recommended
White-browed Hawk *Leucopternis kuhli*	E Peru (C Loreto S to Madre de Dios), N Bolivia (Pando) and Amazonian Brazil S of R Amazon (from R Madeira E to E Pará).	NGT. CITES II. Very poorly known, but so much forest in its extensive range remains intact that species can not be considered of immediate concern. Surveys and research required.	Not recommended
White-necked Hawk *Leucopternis lacernulata*	E Brazil, from Alagoas and S Bahia to Sáo Paulo and Santa Catarina.	Vulnerable/Rare. CITES II. Although reported in a number of protected reserves, species should be considered vulnerable owing to low population densities, significant distances between protected areas, and massive deforestation of habitat outside protected areas. Surveys and research required.	Not recommended
Semiplumbeous Hawk *Leucopternis semiplumbea*	Honduras S to W Colombia (E to Magdalena Valley) and NW Ecuador (Esmeraldas).	NGT. CITES II. Currently considered near-threatened. Perhaps of little concern at present, as is the commonest hawk in some areas of primary forest, and is tolerant of second growth.	Not recommended
White Hawk	***L.a. ghiesbreghti*** - S Mexico	NGT. CITES II.	Not recommended

Leucopternis albicollis 4 subspecies *L.a. ghiesbreghti, L.a. costaricensis, L.a. williaminae, L.a. albicollis*	(Oaxaca and Veracruz) to Guatemala and Belize. ***L.a. costaricensis*** - Honduras to Panama and W Colombia. ***L.a. williaminae*** - NW Colombia (upper Sinú and lower Magdalena Valleys S to Valle) and extreme NW Venezuela (Perijá). ***L.a. albicollis*** - E Colombia, NW Venezuela (NW Zulia), Trinidad and the Guianas through Amazonia to E Peru, E Ecuador, N & E Bolivia (La Paz, Santa Cruz) and C & E Brazil (C Mato Grosso and N Maranhão).		
Grey-backed Hawk *Leucopternis occidentalis*	W ecuador and adjacent NW Peru. Single record from E Andean slope now questioned by its authors.	Endangered. CITES II. Massive deforestation affecting 90% of former range has reduced the population to only a few areas; . Some birds persist in very disturbed, fragmented forest mosaics in Ecuador.	Not recommended
Mantled Hawk *Leucopternis polionota*	E Brazil (Alagoas and Bahia) S to E Uruguay and E Paraguay (Alto Paraná). Purported Argentinian distribution (in Misiones) apparently based on supposition, with no confirmed records or data.	NGT. CITES II. Currently considered near-threatened. Status poorly known: rare or locally distributed; with massive deforestation going on throughout range	Not recommended
Rufous Crab-hawk *Buteogallus aequinoctialis*	Orinoco Delta in E Venezuela along coast to Paraná, S Brazil.	NGT. CITES II. Status of no immediate concern, but restricted habitat makes it highly susceptible locally to any form of deterioration or loss of this habitat.	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Common Black Hawk *Buteogallus anthracinus* 3 subspecies *B.a. anthracinus, B.a. gundlachii, B.a. utilensis*	***B.a. anthracinus*** - SW & S USA (S Utah and Arizona to Texas) through Central America to Panama and N Colombia, then along Caribbean coast to NW Guyana, Trinidad and St Vincent (Lesser Antilles); penetrates inland to Huila, Colombia. ***B.a. gundlachii*** - Cuba and I of Pines. ***B.a. utilensis*** - Cancún I and Cozumel I, off Yucatán; Utila I and Guanaja I, in Gulf of Honduras; and perhaps other adjacent islands.	NGT. CITES II.	Not recommended

Mangrove Black Hawk *Buteogallus subtilis* 3 subspecies *B.s. rhizophorae, B.s. bangsi, B.s. subtilis*	***B.s. rhizophorae*** - Pacific coast of El Salvador and Honduras; probably from extreme SW Mexico (Chiapas) locally to Nicaragua. ***B.s. bangsi*** - Pacific coast of Costa Rica and Panama, including Pearl Is. ***B.s. subtilis*** - Pacific coast of Colombia (and offshore islands), Ecuador and adjacent extreme N Peru (Tumbes).	NGT. CITES II. Status poorly documented, partly due to taxonomic confusion. In places is fairly common, but few records for Colombia; common in Pearl Is, off Panama.	Not recommended
Great Black Hawk *Buteogallus urubitinga* 2 subspecies *B.u. ridgwayi, B.u. urubitinga*	***B.u. ridgwayi*** - Mexico (C Sonora and S Tamaulipas) S to W Panama. ***B.u. urubitinga*** - E Panama, W of Andes S to W Ecuador, and E of Andes E to the Guianas, Trinidad and Tobago, and S through E Bolivia and Brazil to Paraguay, Uruguay and N Argentina (Tucumán, Santiago del Estero, Santa Fe).	NGT. CITES II.	Not recommended
Savanna Hawk *Buteogallus meridionalis*	W Panama (Chiriquí) through tropical South America W of Andes to NW Peru, and E of Andes E to the Guianas and Trinidad, and S through Ecuador, E Peru, E Bolivia and Brazil to N Argentina (Tucumán, Córdoba and Santa Fe).	NGT. CITES II.	Not recommended
Harris' Hawk *Parabuteo unicinctus* 2 subspecies *P.u. harrisi, P.u. unicinctus*	***P.u. harrisi*** - SW USA (S California to Texas) through Mexico and Central America (except Belize and Honduras) to drier Pacific slope regions of W Colombia, Ecuador and Peru. ***P.u. unicinctus*** - NE Colombia and W Venezuela S through E Bolivia and C & NE Brazil (Maranhão and Ceará) to S Argentina (Río Negro) and SC Chile (Aisén).	NGT. CITES II.	Phsase Out
Black-collared Hawk *Busarellus nigricollis* 2 subspecies *B.n. nigricollis, B.n. leucocephalus*	***B.n. nigricollis*** - C Mexico (Sinaloa and Veracruz) S through Central America to Amazonia, W to E Ecuador and E Peru, E to the Guianas and Trinidad, and S through E Bolivia to S Brazil. ***B.n. leucocephalus*** - Paraguay, Uruguay and N Argentina (S to Salta, Santa Fe and Corrientes).	NGT. CITES II. Apparently declining in Panama, due to drainage of wetlands; same may well be true elsewhere.	Not recommended

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Black-chested Buzzard-eagle *Geranoaetus melanoleucus* 2 subspecies *G.m. australis, G.m. melanoleucus*	***G.m. australis*** - NW Venezuela (Mérida Andes) through W South America S to Tierra del Fuego. ***G.m. melanoleucus*** - S & E Brazil (Alagoas, Rio de Janiero and São Paulo) to Paraguay, E Argentina (N of Buenos Aires) and Uruguay.	NGT. CITES II. Declines reported in S Argentina, in areas where strychnine used by sheep ranchers.	Not recommended
Black Solitary Eagle *Harpyhaliaetus solitarius* 2 subspecies *H.s. sheffleri, H.s. solitarius*	***H.s. sheffleri*** - Locally in highlands from W Mexico (Sonoroa) to Panama. ***H.s. solitarius*** - Locally from Colombia (Santa Marta Mts) E to N Venezuela and S through humid Andes to NW Argentina; also occurs in the Guianas	NGT. CITES II. Currently considered near-threatened. Status very poorly known; apparently rare throughout its broad latitudinal range.	Not recommended
Crowned Solitary Eagle *Harpyhaliaetus coronatus*	E Bolivia (Santa Cruz), W Paraguay and S Brazil (S from Mato Grosso and Goiás) to S Argentina (Mendoza and Río Negro); no definitive records from Uruguay, where probably occurs.	Vulnerable. CITIES II. Very poorly known. Occurs over large area, but at very low densities. Little hard evidence available on populations and trends.	Not recommended
Grey Hawk *Buteo nitidus* 4 subspecies *B.n. plagiatus, B.n. costaricensis, B.n. nitidus, B.n. pallidus*	***B.n. plagiatus*** - SW USA (Texas to New Mexico) to NW Costa Rica. ***B.n. costaricensis*** - SW Costa Rica to N Colombia and W Ecuador. ***B.n. nitidus*** - E Colombia and E Ecuador, E to Venezuela and the Guianas, and S through Amazonian Brazil to N Maranhão. ***B.n. pallidus*** - SC Brazil (Piauí to Rio de Janeiro and Mato Grosso) and E Bolivia, S to Paraguay and NC Argentina (Tucumán and Chaco).	NGT. CITES II.	Phase Out
Red-shouldered Hawk *Buteo lineatus* 5 subspecies *B.l. elegans, Bl.l. lineatus, B.l. texanus, B.l. alleni, B.l. extimus*	***B.l. elegans*** - S Oregon (NW USA) to N Baja California (Mexico). ***B.l. lineatus*** - E North America, from S Canada to C USA. ***B.l. texanus*** - S Texas (USA) to Veracruz (CE Mexico). ***B.l. alleni*** - SC Texas to South Carolina and N Florida. ***B.l. extimus*** - Florida and Florida Keys.	NGT. CITES II. May have undergone slight overall decline since 1946; thought to be result of alterations and loss of habitat; Christmas Bird Counts show winter populations have declined, except in California.	Phase Out
Ridgway's Hawk *Buteo ridgwayi*	Hispaniola and several adjacent islets.	Indeterminate. CITES II. Conflicting evidence; situation might be urgent. Locally common,	Not recommended

		yet rare over its entire range, which itself is limited to a few islands. Formerly widespread, but shooting and extensive deforestation must have taken substantial toll on population .	
Broad-winged Hawk *Buteo platypterus* 6 subspecies *B.p. platypterus, B.p. cubanensis, B.p. brunnescens, B.p. insulicola, B.p. rivierei, B.p. antillarum*	***B.p. platypterus*** - C & S Canada to S USA; winters S to Brazil. ***B.p. cubanensis*** - Cuba. ***B.p. brunnescens*** - Puerto Rico. ***B.p. insulicola*** - Antigua (Lesser Antilles). ***B.p. rivierei*** - Dominica, Martinique and St. Lucia (Lesser Antilles). ***B.p. antillarum*** - St Vincent and Grenada to Tobago.	NGT. CITES II.	Phase Out

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
White-rumped Hawk *Buteo leucorrhous*	Apparently disjunct distribution: mountains of Venezuela and Colombia through Ecuador and Peru to NW Bolivia (Cochabamba, La Paz); Paraguay, S Brazil (N to Minas Gerais) and N Argentina (Salta, Tucumán, Chaco and Misiones).	NGT. CITES II. Very little known, and status uncertain	Not recommended
Short-tailed Hawk *Buteo brachyurus* 2 subspecies *B.b fuliginosus, B.b. brachyurus*	***B.b. fuliginosus*** - S Florida (USA); E Mexico to Panama. ***B.b. brachyurus*** - Colombia S to W Ecuador, E to the Guianas and Brazil, and S through E Peru and E Bolivia (La Paz and Cochabamba) to Paraguay and N Artentina (Jujuy, Tucumán, Misiones).	NGT. CITES II. Nowhere common, e.g. uncommon and thinly spread over Colombia; uncommon to rare in Florida (USA). Occurs over very large range, and is tolerant of disturbed habitat; situation apparently secure.	Not recommended
White-throated Hawk *Buteo albigula*	Andes, from Venezuela and Colombia S to C Chile and WC Argentina.	NGT. CITES II. Very poorly known. Generally rare and local throughout range, e.g. in Colombia. Preferred altitudinal range relatively less affected by human activities, especially transformation; also shows tolerance of disturbed habitat. Surveys and research required.	Not recommended
Swainson's Hawk *Buteo swainsoni*	W & C North America from Alaska SE to Minnesota, and S to N Mexico. Winters mostly in South America, especailly in N Argentina, S Brazil and Paraguay; also some birds in S & W USA.	NGT. CITES II.	Phase Out

White-tailed Hawk *Buteo albicaudatus* 3 subspecies *B.a. hypospodius,* *B.a. colonus,* *B.a. albicaudatus*	***B.a. hypospodius*** - SC USA (S Texas) and NW Mexico (Sonora) to N Colombia and NW Venezuela. ***B.a. colonus*** - E Colombia E to Surinam (exept NW Venezuela), and S to Amazon, E from at least Manaus to Atlantic coast; Aruba, Curaçao, Bonaire and Trinidad. ***B.a. albicaudatus*** - Extreme SE Peru and S Brazil (S from Mato Grosso, Goiás and Bahia) through N & E Bolivia, Paraguay and Uruguay to N & C Argentina (S to Río Negro).	NGT. CITES II.	Phase Out
Galapagos Hawk *Buteo galapagoensis*	Galapagos Is.	Rare. CITES II. . Formerly on all large islands, and many of smaller islands, but range now greatly reduced and may now have been extirpated from five islands. Seems secure on Santiago and Santa Fe. Might be a species readily responsive to manipulative intervention, should populations reach dangerously low levels.	Not recommended
Red-backed Hawk *Buteo polyosoma* 2 subspecies *B.p. polyosoma,* *B.p. exsul*	***B.p. polyosoma*** - C Andes of Colombia S through Andes to Patagonia and Tierra del Fuego; also Falkland Is. ***B.p. exsul*** - Alejandro Selkirk I (Más Afuera) in Juan Fernández Is, off SC Chile.	NGT. CITES II. Status poorly known, but in general appears to be relatively secure, and locally common, e.g. EC Ecuador. Apparently declining in Chile.	Phae Out
Puna Hawk *Buteo poecilochrous*	Andes from S Colombia (C Andes and Cauca) S to N Chile and NW Argentina.	NGT. CITES II.	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Zone-tailed Hawk *Buteo albonotatus*	Range disjunct or incompletely known: NW & NC Mexico (from Baja California) and adjacent USA, S through Yucatán (not recorded in Belize) and Guatemala (including W highlands) to Panama, including Pearl Is. In South America, distribution incompletely encircles Amazon Basin: W Ecuador; C Peru, near Lima; N Colombia (Sta Marta Mts to Magdalena) E through N & SE Venezuela to the Guianas and Trinidad; N, E & SE Brazil (from Amazon Delta and I de Marajó, S and E through Ceará,	NGT. CITES II.	Not recommended

	Pernambuco, Alagoas and Bahia to Paraná) W through Paraguay to N & E Bolivia (Beni, Santa Cruz).		
Hawai'ian Hawk *Buteo solitarius*	Endemic to Hawaiian Is; known to breed only on Hawaii I, but vagrants seen on at least three other islands of archipelago.	Rare. CITES II. Currently listed as endangered by government of USA, but recently (1993) proposed for down-listing to threatened. Total population thought to be fairly stable and roughly estimated at 2700 birds, but figure principally from extrapolations of home range sizes of radio-tagged birds. Lack of accurate information on historical and current numbers makes assessment of population trends impossible.	Phase Out
Red-tailed Hawk *Buteo jamaicensis* 14 subspecies *B.j. alascensis, B.j. harlani, B.j. calurus, B.j. borealis, B.j. kriderii, B.j. fuertesi, B.j. hadropus, B.j. kemsiesi, B.j. costaricensis, B.j. fumosus, B.j. socorroensis, B.j. umbrinus, B.j. solitudinis, B.j. jamaicensis*	***B.j. alascensis*** - SE Alaska (USA) and coastal British Columbia (W Canada). ***B.j. harlani*** - Interior of Alaska, SW Yukon and N British Columbia. ***B.j. calurus*** - W North America W of Great Plains. ***B.j. borealis*** - N America E of Great Plains of C USA and Canada. ***B.j. kriderii*** - Plains of SC Canada S to Wyoming (NC USA). ***B.j. fuertesi*** - Texas (S USA) to N Mexico. ***B.j. hadropus*** - Highlands of C Mexico. ***B.j. kemsiesi*** - Chiapas (S Mexico) to N Nicaragua. ***B.j. costaricensis*** - Costa Rica. ***B.j. fumosus*** - Tres Marias Is, off WC Mexico. ***B.j. socorroensis*** - Socorro I (Revillagigedo Is), off W Mexico. ***B.j. umbinus*** - Florida (SE USA). ***B.j. solitudinis*** - Bahamas and Cuba. ***B.j. jamaicensis*** - Jamaica, Puerto Rico and Hispaniola E to N Lesser Antilles.	NGT. CITES II.	Monitored Program
Rufous-tailed Hawk *Buteo ventralis*	From SC Chile (Ñuble) and SC Argentina (Río Negro) S through Patagonia to Straits of Magellan.	NGT. CITES II. Until recently red-listed in category Insufficiently Known, but currently considered near-threatened. Apparently rare throughout range; status remains poorly known, but species does not appear to be in immediate danger.	Not recommended

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Eurasian Buzzard *Buteo buteo* 11 subspecies *B.b. buteo, B.b. arrigonii, B.b. rothschildi, B.b. insularum, B.b. bannermani, B.b. vulpinus, B.b. menetriesi, B.b. japonicus, B.b. refectus, B.b. toyoshimai, B.b. oshiroi,*	***B.b. buteo*** - Europe E to Finland, Romania and Turkey; also Madeira; winters in S of range, and irregularly S to Liberia. ***B.b. arrigonii*** - Corsica and Sardinia. ***B.b. rothschildi*** - Azores. ***B.b. insularum*** - Canary Is. ***B.b. bannermani*** - Cape Verde Is. ***B.b. vulpinus*** - N Scandinavia and European Russia E to R Yenisey, and S to N Caucasus and C Asia (Altai, Tien Shan); winters mainly in Africa S of Sahara, and also in S Asia. ***B.b. menetriesi*** - S Crimea and Caucasus S to E Turkey and N Iran. ***B.b. japonicus*** - L Baikal area and Mongolia E through Amurland and Manchuria to Sakhalin, Japan and Kuril Is, and S to Tibet, and possibly NW India; winters in S Asia, from India to Japan. ***B.b. refectus*** - W China and perhaps Himalayas. ***B.b. toyoshimai*** - Izu Is and Bonin Is. ***B.b. oshiroi*** - Daito Is (to E of C Ryukyu Is).	NGT. CITES II.	Not recommended
Mountain Buzzard *Buteo oreophilus* 2 subspecies *B.o. oreophilus, B.o. trizonatus*	***B.o. oreophilus*** - Highlands of Ethiopia S to Tanzania and Malawi. ***B.o. trizonatus*** - S & E South Africa.	NGT. CITES II. Vulnerable due to limited and patchy distribution of habitat, especially to forest cutting.	Not recommended
Madagascar Buzzard *Buteo brachypterus*	Madagascar.	NGT. CITES II. Only uncommon on deforested central plateau.	Not recommended
Long-legged Buzzard *Buteo rufinus* 2 subspecies *B.r. rufinus, B.r. cirtensis*	***B.r. rufinus*** - SE Europe and Asia Minor E through Iran and Afghanistan to NW Mongolia and S to NW India (Garhwal); winters to NE Africa and N India. ***B.r. cirtensis*** - N Africa, from Mauritania to Egypt; Arabia.	NGT. CITES II. Population sizes and trends little known.	Not recommended
Upland Buzzard *Buteo hemilasius*	S Siberia and Mongolia E to Manchuria, and S to C China and SE Tibet. Winters in N	NGT. CITES II. Status very poorly known; apparently infrequent or rare throughout most of breeding	Not recommended

	India (Kashmir to Sikkim), E China and Korea.	range and in winter quarters, although locally abundant, e.g. in Tebet. Generally rare, but locally common in extreme S Siberia and Mongolia. Possibly subject to fluctuations related to abundance of rodents.	
Ferruginous Hawk *Buteo regalis*	S Canada from S Alberta to SW Manitoba, S through WC USA to N Texas; winters S to N Mexico.	NGT. CITES II. Local losses and apparent reduction of entire population have led to calls for listing as threatened species; not listed because of insufficient supporting data.	Phase Out

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Rough-legged Buzzard *Buteo lagopus* 4 subspecies *B.l. lagopus, B.l. menzbieri, B.l. kamtschatkensis, B.l. sanctijohannis*	***B.l. lagopus*** - N Eurasia, from Scandinavia E to area of R Ob and R Yenisey; winters mainly in C Europe and C Asia. ***B.l. menzbieri*** - NE Asia E of R Ob and R Yenisey; winters S to C Asia, N China and Japan. ***B.l. kamtschatkensis*** - Kamchatka; presumably winters in EC Asia. ***B.l. sanctijohannis*** - Alaska and N Canada; winters S to C & S USA.	NGT. CITES II.	Phase Out
Red-necked Buzzard *Buteo auguralis*	Sierra Leone E to Uganda and Ethiopia, and S to N Angola; outside breeding season, occurs in Sahel zone.	NGT. CITES II. Vulnerable to degradation of woodland but uses many secondary habitats and probably benefits from cutting of rain forest.	Not recommended
Augur Buzzard *Buteo augur*	Ethiopia S to Zimbabwe and W to S Angola and N & C Namibia.	NGT. CITES II. Vulnerable to extensive afforestation of grassland habitat, or to lowered carrying capacity through overgrazing.	Not Recommended
Archer's Buzzard Buteo archeri	Highlands of N Somalia.	NGT. CITES II. Status uncertain. Appears vulnerable, due to small range and possibility of rapid degradation of habitat by cutting of trees and overgrazing. Virtually unstudied; on previous information lumped with related species *B. augur* and *B. rufofuscus.*	Not recommended
Jackal Buzzard *Buteo rufofuscus*	South Africa, S & C Namibia, Lesotho, Swaziland, S Mozambique and S Botswana.	NGT. CITES II.	Phase Out
Guiana Crested Eagle *Morphnus guianensis*	Guatemala and Honduras through Central America to Colombia and S to Paraguay, extreme NE Argentina	NGT. CITES II. Formerly red-listed in category Rare, but currently considered near threatened. Not immediately	Not recommended

	(Misiones) and S Brazil; W of Andes, ranges S only to Serranía de Baudó (WC Colombia).	threatened, but large size and low population densities make species particularly sensitive to the hunting pressure that accompanies any human incursions into forests.	
Harpy Eagle *Harpia harpyja*	S Mexico (from S Veracruz, Oaxaca and apparently Campeche) through Central America to Colombia, then E through Venezuela to the Guianas and S through E Bolivia and Brazil to extreme NE Argentina (Misiones).	NGT. CITES II. Formerly red-listed in category Rare, but currently considered near threatened. Sparsely distributed throughout extensive range, and generally rare.	Candidate Species
New Guinea Eagle *Harpyopsis novaeguineae*	New Guinea.	Vulnerable. CITES II. Low population density and apparently low reproductive rate; few detailed observations by ornithologists, and biology poorly known.	Not recommended
Great Philippine Eagle *Pithecophaga jefferyi*	Larger islands of N & E Philippines, on Luzon, Leyte, Samar and Mindanao.	Endangered. CITES I. Probably less than 200 individuals remain in wild. Throughout range, main factors in population reduction are: loss of forest habitat; shooting for trophies; and capture of eagles for pets.	Not recommended
Indian Black Eagle *Ictinaetus malayensis* 2 subspecies *I.m. perniger, I.m. malayensis*	***I.m. perniger*** - N India and Nepal; also S India (W & E Ghats, Orissa) and Sri Lanka. ***I.m. malayensis*** - Burma, SC & SE China (Yunnan, Fujian) and Taiwan, S through Indochina and Malay Peninsula to Greater Sundas, Sulawesi and Moluccas; possibly also Banggai and Sula Is.	NGT. CITES II. Main threat is loss of forests.	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5)</u>**	**TAG Recommendation**
Lesser Spotted Eagle *Aquila pomarina* 2 subspecies *A.p. pomarina, A.p. hastata*	***A.p. pomarina*** - C, E & SE Europe through Turkey and Caucasus to S Caspian lowlands; E limit not well known. Winters in S Africa and perhaps E Africa. ***A.p. hastata*** - India (mainly N), Bangladesh, and perhaps also N Burma and Pakistan.	NGT. CITES II. Has disappeared from much of former range in W, e.g. W Germany, or become very rare, e.g. E Germany, former Yugoslavia, Greece.	Not recommended
Greater Spotted Eagle *Aquila clanga*	EC Europe E through Russia to S Ussuriland and Manchuria ; isolated populations in N Iran and NC India. Winters from S Europe, NE & E Africa and Middle East through N Pakistan to S & E China and Indochina.	NGT. CITES II. Total world population certainly only some few thousand birds, but populations very little studied. Very sensitive to habitat alterations, especially drainage of wetlands.	Not recommended

Tawny Eagle *Aquila rapax* 3 subspecies *A.r. vindhiana, A.r. belisaurius,* *A.r. rapax*	***A.r. vindhiana*** - Pakistan, India, and S Nepal ; possibly also Burma. ***A.r. belisarius*** - Morocco and Algeria ; S Arabia and tropical Africa S to N Zaire and N Kenya. ***A.r. rapax*** - S Kenya and S Zaire S to South Africa and W to Angola and Namibia.	NGT. CITES II. Very uncommon in Nepal, where presumed to be resident. Status in Burma unknown: may be more vagrant; possibly very rare resident.	Phase-out
Steppe Eagle Aquila nipalensis 2 subspecies *A.n. orientalis,* *A.n. nipalensis*	***A.n. orientalis*** - SE European Russia E tl L Balkhash and E Kazakhstan, or perhaps to Tien Shan and Altai; winters in Middle East, Arabia and E & S Africa. ***A.n. nipalensis*** - Altai and Tibet E to Manchuria; winters in S Asia.	NGT. CITES II. Extirpated from large areas of former range in W; has disappeared from Romania, Moldavia and Ukraine due to habitat alteration, with conversion of steppes into fields, and persecution; also adversely affected by power lines.	Not recommended
Spanish Imperial Eagle *Aquila adalberti*	C, W & S Spain; formerly more widespread, occurring in Portugal and Morocco.	Endangered. CITES I. One of rarest of all birds of prey. Total population down to c. 150 pairs. Extinct in Morocco, Portugal and many parts of Spain, and now restricted to C, W & S Spain. Major conservation programme in progress in country of orgin..	Not recommended
Eastern Imperial Eagle *Aquila heliaca*	C Europe and Turkey E to Transbaikalia and Mongolia. Winters S to E Africa, Arabia, N India and E China.	Rare. CITES I. Rapid decline in Europe since World War II;. Now very rare or extinct in many areas of SE Europe. Only in Slovakia and Hungary is species well protected and increasing. International working group for species has been formed, and 3 meetings held in Hungary. Conservation Action Plan in preparation.	Not recommended
Wahlberg's Eagle *Aquila wahlbergi*	Mauritania E t Ethiopia and S to South Africa.	NGT. CITES II. Vulnerable to clearing of woodland; not known to be affected by pesticides, but accidental poisoning may result in local population declines.	Not recommended
Gurney's Eagle *Aquila gurneyi*	New Guinea, W Papuan Is and Aru Is; also Moluccas, where recorded on Morotai, Halmahera, Ternate, Bacan and Ambon, and recently on Seram.	NGT. CITES II. Apparently presents low population density; seldom encountered by ornithologists; biology unknown. Possibly threatened by deforestation in lowlands.	Not recommended

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Golden Eagle *Aquila chrysaetos* 6 subspecies *A.c. homeyeri, A.c. chrysaetos, A.c. daphanea, A.c. japonica, A.c. kamtschatica, A.c. canadensis*	***A.c. homeyeri*** - Iberian Peninsula, NW Africa and large Mediterranean islands E through Egypt, Asia Minor and Arabia to Caucasus and Iran. ***A.c. chrysaetos*** - NW & C Europe E to W & C Siberia and Altai. ***A.c. daphanea*** - Turkestan E to Manchuria, and S to Pakistan, Himalayas and SW China. ***A.c. japonica*** - Korea and Japan. ***A.c. kamtschatica*** - W & C Siberia and Altai E to Kamchatka. ***A.c. canadensis*** - North America, from Alaska S to Durango (WC Mexico), and E to Labrador, Quebec and New York.	NGT. CITES II.Limiting factors now are food supply and conservation of favourable habitat.	Monitored Program
Wedge-tailed Eagle *Aquila audax* 2 subspecies *A.a. audax, A.a. fleayi*	***A.a. audax*** - Australia, S New Guinea. ***A.a. fleayi*** - Tasmania.	NGT. CITES II. Local declines in S through habitat disturbance in heavily settled and farmed areas, because intolerance to human activity leads to nest abandonment; has benefited elsewhere from thinning of tree cover, introduction of rabbit and provision of abundant carrion.	Not recommended
Verreaux's Eagle *Aquila verreauxii*	S Chad and W Sudan ; from Israel, Egypt (Sinai) and SE Arabian Peninsula ; Ethiopia to Somalia and thence S, with main range Kenya S to South Africa.	NGT. CITES II. Rugged terrain often last to be modified, but species declines where drought, overgrazing and hunting combine to reduce hyrax prey. Persecuted heavily in some areas of small-stock farming, and eliminated from parts of S Africa. . The most studied eagle in Africa.	Phase-out
Bonelli's Eagle *Hieraaetus fasciatus* 2 subspecies *H.f. fasciatus, H.f. renschi*	***H.f. fasciatus*** - NW Africa and Iberian Peninsula E through Mediterranean, SW Asia and Arabia to Afghanistan, Pakistan and India, and on through N Indochina to S China. ***H.f. renschi*** - Sumbawa, Timor, Wetar, Luang and probably Flores (Lesser Sunda Is).	NGT. CITES II. In decline in Europe, with some regional stabilization. Almost extinct in former USSR; widely distributed but rare or uncommon in Indian Subcontinent.	Not recommended
African Hawk-eagle *Hieraaetus spilogaster*	Senegambia E to Ethiopia and Somalia, and S to NE South Africa.	NGT. CITES II. Vulnerable to cutting of woodland, and persecuted in many areas for attacks on poultry. Not known to be affected by pesticides.	Not recommended
Booted Eagle	SW Europe and NW Africa	NGT. CITES II. Population sizes	Not recommended

Hieraaetus pennatus	through E Europe, Asia Minor and Caucasus to C Asia, NE to Mongolia and L Baikal area, and SE to N India; also Cape Province (S South Africa) and perhaps Namibia. Winters mostly in Africa S of Sahara, and in S Asia, especially India.	not well know, and only fairly approximate estimate available; little information on trends, although apparently stable in general. Some negative factors affecting species are habitat degradation, decline in prey species, and human persecution; declining in Ukraine due to deforestation.	
Little Eagle *Hieraaetus morphnoides* 2 subspecies *H.m. weiskei, H.m. morphnoides*	***H.m. weiskei*** - New Guinea. ***H.m. morphnoides*** - Australia.	NGT. CITES II. Possibly affected locally, to minor degree, by extensive habitat clearance or by excessive loss of trees.	Not recommended
Ayres's Hawk-eagle *Hieraaetus ayresii*	Sierra Leone E to Ethiopia and Somalia, then S to N Namibia, N Botswana and NE South Africa.	NGT. CITES II. Generally considered rare and sparsely distributed; apparently only reasonably common in woodlands of C Africa. Vulnerable to clearing of woodland.	Not recommended
Common Name **Scientific Name**	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5)</u>**	**TAG Recommendation**
Rufous-bellied Eagle *Hieraaetus kienerii* 2 subspecies *H.k. kienerii, H.k. formosus*	***H.k. kienerii*** - NE India and Nepal; SW India (W Ghats) and Sri Lanka. ***H.k. formosus*** - Burma and Hainan through W, S & EC Indochina and Malay Peninsula to Greater Sundas, Bali, Philippines and Sulawesi.	NGT. CITES II. Widespread, but status variable: rare in Java and Burma; scarce in Nepal; uncommon in Philippines; moderately common in Sulawesi. During recent raptor survey in Java only rarely recorded, invariably in forest fragments. Recently found to be common in forested areas of NE India and SW India (W Ghats). Has undoubtedly suffered as result of extensive deforestation that still continues throughout most of range.	Not recommended
Martial Eagle *Polemaetus bellicosus*	Senegambia E to Ethiopia and S to South Africa.	NGT. CITES II. Heavily persecuted in some small-stock and free-range poultry farming areas, and extirpated from parts of South Africa, Namibia and Zimbabwe. B	Phase Out
Black-and-white Hawk-eagle *Spizastur melanoleucus*	E & S Mexico (Veracruz, Oaxaca) through Central America to Colombia, whence S on Pacific slope to W Ecuador, and E through N Venezuela to the Guianas, then S through E & S Brazil to NE Argentina and Paraguay; E Peru (Loreto) and N & E Bolivia (Beni to Santa Cruz).	NGT. CITES II. Currently considered near-threatened. Extensive range, but spotty distribution. Rare in most areas, but relatively common at one forest site in French Guiana, with estimated average density of at least 7 individuals/10,000 ha; rare and very local in Colombia; sparesly distributed throughout Brazil. Tolerance of diverse habitat types suggest species should not be too seriously affected by	Not recommended

		transformation of habitat.	
Long-crested Eagle *Lophaetus occipitalis*	Senegambia E to Ethiopia and S to N Namibia, N Botswana and E South Africa.	NGT. CITES II. Vulnerable to degradation of woodland and drainage of wetlands, but compensates to some extent by using exotic plantations, small agricultural clearings and other secondary forest habitats.	Not recommended
Cassin's Hawk-eagle *Spizaetus africanus*	Sierra Leone and Liberia E to W Uganda and E Zaire; also NW Angola.	NGT. CITES II. Recorded infrequently, but probably commoner than supposed, and large tracts of forest habitat still exist in Congo Basin. Vulnerable to deforestation, but uses many secondary habitats; numbers probably reduced in many areas of W Africa.	Not recommended
Changeable Hawk-eagle *Spizaetus cirrhatus* 6 subspecies *S.c. cirrhatus, S.c. ceylanensis, S.c. andamanensis, S.c. Limnaeetus, S.c. vanheurni, S.c. floris*	***S.c. cirrhatus*** - India S of Rajasthan and Gangetic Plain. ***S.c. ceylanensis*** - Sri Lanka. ***S.c. andamanensis*** - Andaman Is. ***S.c. limnaeetus*** - N India and Nepal through Burma, W & S Indochina and Malay Peninsula to Greater Sundas and W & SE Philippines (Palawan, Mindoro, Mindanao). ***S.c. vanheurni*** - Simeulue I (off W Sumatra). ***S.c. floris*** - Mountains of Sumbawa and Flores.	NGT. CITES II. Widespread and apparently common to uncommon throughout extensive range; scarce in Java, due to deforestation.	Not recommended
Mountain Hawk-eagle *Spizaetus nipalensis* 3 subspecies *S.n. orientalis, S.n. nipalensis, S.n. kelaarti*	***S.n. orientalis*** - Japan. ***S.n. nipalensis*** - Himalayas of India and Nepal E through S China and Hainan to E China and Taiwan, and S to N Indochina and N Malay Peninsula; recently Vietnam. *S.n. kelaarti* - SW India (W Ghats) and Sri Lanka.	NGT. CITES II. Uncommon to rare; has undoubtedly suffered as result of extensive deforestation that still continues through most of range.	Not recommended
Blyth's Hawk-eagle *Spizaetus alboniger*	S Burma (Tenasserim) and S Thailand through Malay Peninsula to Sumatra and off-lying islands; N Borneo.	NGT. CITES II. Generally appears to be uncommon. Long term threat is loss of habitat, with extensive deforestation throughout much of range.	Not recommended
Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Javan Hawk-eagle *Spizaetus bartelsi*	Java.	Vulnerable. CITES II. One of rarest of all raptors. Chronic loss of forest is major factor in decline of species, along with expotential growth of human population in Java. .	Not recommended
Sulawesi Hawk-	Sulawesi and off-lying islands	NGT. CITES II. Currently	Not recommended

eagle *Spizaetus lanceolatus*	of Muna and Butung; Baggai Is (Peleng) and Sula Is.	considered near-threatened. Generally uncommon and local; status very poorly known.	
Philippine Hawk-eagle *Spizaetus philippensis*	Philippine Is.	NGT. CITES II. Currently considered near-threatened.. Overall status very poorly known.	Not recommended
Wallace's Hawk-eagle *Spizaetus nanus* 2 subspecies *S.n. nanus, S.n. stresemanni*	***S.n. nanus*** - S Burma (Tennaserrim) and S Thailand through Malay Peninsula to Sumatra and Borneo. ***S.n. stresemanni*** - Nias I (off W Sumatra).	Rare. CITES II. Uncommon to rare. Increasingly threatened by loss of lowland rain forest throughout range;. Race *stresmanni* of Nias I currently reckoned to be endangered.	Not recommended
Black Hawk-eagle *Spizaetus tyrannus* 2 subspecies *S.t. serus, S.t. tyrannus*	***S.t. serus*** - C Mexico S to Colombia, whence E of Andes to the Guianas, Trinidad and Brazil, and S to Paraguay and NE Argentina; recent records W of Andes in Ecuador and Peru (but not Colombia). ***S.t.tyrannus*** - E & S Brazil and extreme NE Argentina (Misiones).	NGT. CITES II. Fairly common in suitable habitat, but not in areas that have been heavily disturbed by agriculture. Declining in Mexico, due to habitat loss caused by cattle ranching, the timber industry and tourism.	Not recommended
Ornate Hawk-eagle Spizaetus ornatus 2 subspecies *S.o. vicarius, S.o. ornatus*	***S.o. vicarius*** - SE Mexico through Central America to W Colombia and W Ecuador. ***S.o. ornatus*** - E Colombia E to the Guianas and Trinidad, and S through E Ecuador, NE Peru, N & E Bolivia and Brazil to Paraguay and N Argentina (Jujuy to Misiones).	NGT. CITES II.	Phase Out
Crowned Hawk-eagle *Stephanoaetus coronatus*	Senegambia E to S Kenya and C Ethiopia, and S to Angola, NE Botswana and E South Africa.	NGT. CITES II. Vulnerable to deforestation and overhunting of prey animals, so now rare in many parts of W Africa	Phase Out
Black-and-chestnut Eagle *Oroaetus isidori*	Coastal ranges of NW Venezuela (Carabobo) and NE Colombia (Santa Marta Mts), and S on subtropical slopes of Andes from Venezuela (Mérida) through Colombia, Ecuador and Peru to WC Bolivia andNW Argentina.	NGT. CITES II. Currently considered near-threatened. Rare and patchily distributed; status very poorly known.	Not recommended

FAMILY SAGITTARIIDAE (SECRETARYBIRD)

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Secretarybird *Sagittarius serpentarius*	Senegambia E to Ethiopia and Somalia, and S to South Africa.	NGT. CITES II. Afforestation of grasslands and intensive land use have eliminated habitat, with some compensation where bush has been cleared for grazing or croplands. No total population estimates but	Red SSP

		over 1000 breeding pairs throught to occur in Transvaal Province of South Africa alone.	

FAMILY FALCONIDAE (FALCONS & CARACARAS)

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Black Caracara *Daptrius ater*	E Colombia, S Venezuela and the Guianas S through Amazonia to E Peru, NE Bolivia and C Brazil (Maranhão, N Mato Grosso).	NGT. CITES II. Status very poorly known. Extensive range and catholic taste in terms of habitat and feeding habits suggest species relatively secure.	Not recommended
Red-throated Caracara *Daptrius americanus*	Extreme S Mexico (Chiapas) S to Colombia, S on Pacific slope to W Ecuador, and E of Andes to C Peru, N & E Bolivia and S Brazil (NW Paraná, Mato Grosso and São Paulo).	NGT. CITES II.	Not recommended
Carunculated Caracara *Phalcoboenus carunculatus*	Andes of Ecuador and SW Colombia.	NGT. CITES II. Probably relatively secure at present, as habitat not under significant pressure; no reports of persecution.	Not recommended
Mountain Caracara *Phalcoboenus megalopterus*	Andes from N Peru (Piura), through Bolivia to NW Argentina and C Chile (Colchagua).	NGT. CITES II.	Not recommended
White-throated Caracara *Phalcoboenus albogularis*	S Chile (Ñublé) and S Argentina (S Mendoza) S to Tierra del Fuego.	NGT. CITES II. Habitat not subject to much disturbance, and no persecution reported, so presumably not a species of immediate concern.	Not recommended
Striated Caracara *Phalcoboenus australis*	Islets off extreme S South Africa.	NGT. CITES II. Currently considered near-threatened. Rare overall.	Not recommended
Crested Caracara *Polyborus plancus* 4 subspecies *P.p. pallisud, P.p. audubonii, P.p. cheriway, P.p. plancus*	***P.p. pallidus*** - Tres Marías Is, off W Mexico. ***P.p. audubonii*** - S USA (Florida; Texas to Arizona) through Central America to W Panama; Cuba, I of Pines. ***P.p. cheriway*** - E Panama	NGT. CITES II. Locally persecuted in some farming regions (e.g. in S Chile)	Phase Out

	through C & E Colombia to the Guianas and S to N Peru and R Amazon; Aruba (Netherlands Antilles) E to Trinidad. ***P.p. plancus*** - C Peru and C Bolivia E to Amazon Delta and S to Tierra del Fuego; Falkland Is.		
Yellow-headed Caracara Milvago chimachima 2 subspecies *M.c. cordatus, M.c. chimachima*	***M.c. cordatus*** - S Costa Rica and Panama (including Pearl Is) through Colombia to the Guianas and Trinidad and S (E of Andes) to Amazon. ***M.c. chimachima*** - E Bolivia and Brazil S of Amazon to Paraguay, N Argentina and Uruguay.	NGT. CITES II.	Not recommended
Chimango Caracara *Milvago chimango* 2 subspecies *M.c. chimango, M.c. temucoensis*	***M.c. chimango*** - N & C Chile and N & C Argentina through Paraguay to Uruguay and adjacent Brazil. ***M.c. temucoensis*** - S Chile (from near Concepción) and S Argentina (from R Chubut) S to Tierra del Fuego and Cape Horn. Introduced to Easter I (S Pacific).	NGT. CITES II.	Not recommended
Laughing Falcon *Herpetotheres cachinnans* 2 subspecies *H.c. chapmani, H.c. cachinnans, H.c. queribundus*	***H.c. chapmani*** - Mexico (S Sonora and San Luis Potosí) S to Honduras. ***H.c. cachinnans*** - Nicaragua to Colombia and S to Peru and C Brazil. ***H.c. queribundus*** - E Bolivia and E Brazil (S to São Paulo) to Paraguay and N Argentina.	NGT. CITES II.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Barred Forest-falcon *Micrastur ruficollis* 6 subspecies *M.r. guerilla, M.r. interstes, M.r. zonothorax, M.r. concentricus, M.r.ruficollis, M.r. olrogi*	***M.r. guerilla*** - S Mexico to Nicaragua. ***M.r. interstes*** - Costa Rica and Panama to W Colombia and W Ecuador. ***M.r. zonothorax*** - Colombia and Venezuela, in E Andean foothills, S perhaps to Bolivia. ***M.r. concentricus*** - S Venezuela, the Guianas and Amazonia. ***M.r. ruficollis*** - S of Amazonia in Brazil, Paraguay and NC & NE Argentina. ***M.r. olrogi*** - NW Argentina, in subtropical forests.	NGT. CITES II.	Not recommended
Plumbeous Forest-	SW Colombia (Cauca, Nariño)	Vulnerable. CITES II. Suffering	Not recommended

falcon *Micrastur plumbeus*	and NW Ecuador (Esmeraldas).	from deforestation and degradation of habitat within limited range, both in Colombia and Ecuador	
Lined Forest-falcon *Micrastur gilvicollis*	E Colombia through S Venezuela to the Guianas, and S throughout Amazonia.	NGT. CITES II.	Not recommended
Slaty-backed Forest-falcon *Micrastur mirandollei*	Costa Rica, Panama and Colombia (including W slope of Andes) through the Guianas and Amazonia to E Brazil (Espírito Santo).	NGT. CITES II. Status very poorly known, pehaps in part because so easily confused with other species. Widely distributed, but everywhere rare. One of rarest forest raptors in French Guiana, with estimated minimum average density of only 4 individuals/10,000 ha of forest.	Not recommended
Collared Forest-falcon *Micrastur semitorquatus* 2 subspecies *M.s. naso, M.s. semitorquatus*	***M.s. nasu*** - NC Mexico (Sinaloa to Tamaulipas) S through Central America to N & W Colombia and Ecuador. ***M.s. semitorquatus*** - E Colombia E to the Guianas, and S through E Peru, N & E Bolivia and Brazil to Paraguay and N Argentina.	NGT. CITES II. Not uncommon over vast range; secretive nature presumably reduces threat from hunters.	Not recommended
Buckley's Forest-falcon *Micrastur buckleyi*	Amazonian reaches of Ecuador and Peru; single record from SE Colombia; apparent recent record from Brazil (R Juruá, Acre) has now been withdrawn.	Insufficiently known. CITES II. Status virtually unknown. Secretive nature of genus and sympatry with very similar *M.semitorquatus* render estimates of population levels very difficult.	Not recommended
Spot-winged Falconet *Spiziapteryx circumcinctus*	E Bolivia (Santa Cruz) through Paraguay to N & C Argentina (S to Río Negro).	NGT. CITES II. Status virtually unknown; habitat is not amongst most seriously devastated in the region. Single record from Paraguay.	Not recommended
African Pygmy-falcon *Polihierax semitorquatus*	S Ethiopia, Somalia, NE Uganda and Kenya to NC Tanzania; S Angola and Namibia to NW South Africa.	NGT. CITES II.	Yellow SSP
White-rumped Pygmy-falcon *Polihierax insignis* 3 subspecies *P.i. insignis, P.i. cinereiceps, P.i. harmandi*	***P.i. insignis*** - W & C Burma, especially in valley of R Irrawaddy. ***P.i. cinereiceps*** - S Burma (Tenasserim) and Thailand. ***P.i. harmandi*** - S Indochina, in S & C Laos, S Vietnam (S Annam, Cochinchina) and Kampuchea.	NGT. CITES II. Uncommon and local in Thailand.	Not recommended
Collared Falconet *Microhierax caerulescens* 2 subspecies *M.c. caerulenscens, M.c.burmanicus*	***M.c. caerulescens*** - E Himalayas of India (Kumaon) and Nepal to NE India (N Assam). ***M.c. burmanicus*** - Burma E to C & S Indochina.	NGT. CITES II. Tolerance of disturbed habitats, along with fairly varied diet, suggests species in no danger.	Not recommended

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Black-thighed Falconet *Microhierax fringillarius*	S Burma (S Tenasserim) and S Thailand through Peninsular Malaysia to Sumatra, Borneo, Java and Bali.	NGT. CITES II. Tolerance of disturbed habitats, along with fairly varied diet, suggests species in no danger.	Not recommended
White-fronted Falconet *Microhierax latifrons*	N Borneo, in extreme NE Sawawak and Sabah.	NGT. CITES II. Currently considered near-threatened. Status uncertain,.	Not recommended
Philippine Falconet *Microhierax erythrogenys* 2 subspecies *M.e. erythrogenys, M.e. meridionalis*	***M.e. erythrogenys*** - Luzon, Mindoro, Negros and Bohol (Philippines). ***M.e. meridionalis*** - Samar, Leyte and Cebu to Mindanao (Philippines).	NGT. CITES II.	Not recommended
Pied Falconet *Microhierax melanoleucus*	NE India (Assam) E across S China to Zhejiang, and S to N Laos and N & C Vietnam.	NGT. CITES II. Currently considered near-threatened	Not recommended
Lesser Kestrel *Falco naumanni*	SW Europe and N Africa E through E Europe, Asia Minor and Iran to Mongolia and N China (E to Shandong). Winters in Africa S of Sahara; also and irregularly in parts of S Asia.	Rare. CITES II. Drastic and apparently widespread decline in second half of 20th century	Not recommended
Common Kestrel *Falco tinnunculus* 11 subspecies *F.t. tinnunculus, F.t. interstinctus, F.t. objurgatus, F.t. canariensis, F.t. dacotiae, F.t. neglectus, F.t. alexandri, F.t. rupicolaeformis, F.t. archerii, F.t. rufescens, F.t. rupicolus*	***F.t. tinnunculus*** - N Africa, Europe and Middle East E to E Siberia and Soviet Far East. ***F.t. interstinctus*** - Tibet E through N Indochina and S & C China to Korea and Japan; winters S to India, Malay Peninsula and Philippines. ***F.t. objurgatus*** - S India (W & E Ghats) and Sri Lanka. ***F.t. canariensis*** - Madeira and W Canary Is. ***F.t. dacotiae*** - E Canary Is. ***F.t. neglectus*** - N Cape Verde Is. ***F.t. alexandri*** - SE Cape Verde Is. ***F.t. rupicolaeformis*** - NE Africa and Arabia. ***F.t. archerii*** - Somalia, coastal Kenya and Socotra. ***F.t. rufescens*** - W & C Africa, E to Ethiopia and S to S Tanzania and N Angola. ***F.t. rupicolus*** - N Angola, S Zaire and S Tanzania S to S South Africa.	NGT. CITES II.	Not recommended
Madagascar Kestrel	Madagascar and Aldabra Is; perhaps rare vagrant to the	NGT. CITES II. Possible race *aldabranus* included on CITES I.	Not recommended

Falco newtoni	Comoro Is.		
Mauritius Kestrel *Falco punctatus*	Mauritius I, SW Indian Ocean.	Endangered. CITES I. One of the rarest birds in the world by 1974, when only two pairs remained in the wild, due to cumulative loss of forest habitat, pesticides and depredations of introduced hunters. Captive propagation since, raised population in the wild to at least 50 breeding pairs and over 200 birds by 1993. Was, and may still be, vulnerable to pesticide use.	Not recommended
Seychelles Kestrel *Falco araea*	Islands of the Seychelles, W Indian Ocean. On Mahé and its satellites (St Anne, Cerf, Longue and probably Thérèse), Silhouette and North. Reitroduced to Praslin; vagrant to La Digue; and historically on Curieuse, Félicité, Marianne and possibly Sisters.	NGT. CITES II.	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Spotted Kestrel *Falco moluccensis* 2 subspecies *F.m. moluccensis,* *F.m. microbalia*	***F.m. moluccensis*** - Moluccas, from Morotai and Halmahera S to Buru, Seram and Seram Laut. ***F.m. microbalia*** - Sulawesi and surrounding small islands; Java and Lesser Sundas E to Tanimbar Is.	NGT. CITES II.	Not recommended
Australian Kestrel *Falco cenchroides* 2 subspecies *F.c. cenchroides,* *F.c. baru*	***F.c. cenchroides*** - Australia, Tasmania, Lord Howe I, Norfolk I and Christmas I (Indian Ocean). Winters irregularly from Lesser Sundas and Moluccas through Aru Is and S New Guinea; occasionally to New Zealand. ***F.c. baru*** - Montane WC New Guinea.	NGT. CITES II.	Not recommended
American Kestrel *Falco sparverius* 17 subspecies *F.s. sparverius,* *F.s. paulus,* *F.s.peninsularis,* *F.s. tropicalis,* *F.s. nicaraguensis,* *F.s. sparverioides,* *F.s. dominicensis,* *F.s. caribaearum,* *F.s. brevipennis,* *F.s. isabellinus,* *F.s. ochraceus,* *F.s. caucae,*	***F.s. sparverius*** - North America, from Alaska to Newfoundland, and S to W Mexico, except SE USA and coastal W Mexico; winters S through C American to Panama. ***F.s. paulus*** - South Carolina to Florida, USA. ***F.s. peninsularis*** - S Baja California, Sonora and Sinaloa, Mexico. ***F.s. tropicalis*** - S Mexico to N Honduras. ***F.s. nicaraguensis*** - Lowland pine savannas in Honduras and	NGT. CITES II. No reliable estimates for most of Neotropical range. Decreasing in parts of SE USA, e.g. Florida (with entire population of race *paulus*), because of habitat alterations; scarce or decreasing in some other regions of USA, e.g. Texas and Arkansas.	Phase Out

F.s. aequatorialis, F.s. peruvianus, F.s. fernandensis, F.s. cinnamominus, F.s. cearae	Nicaragua. ***F.s. sparverioides*** - Cuba and I of Pines; Bahamas. ***F.s. dominicensis*** - Hispaniola. ***F.s. caribaearum*** - Puerto Rico to Grenada. ***F.s. brevipennis*** - Aruba, Curaçao and Bonaire (Netherlands Antilles). ***F.s. isabellinus*** - Venezuela to N Brazil. ***F.s. ochraceus*** - Mountains of E Colombia and NW Venezuela. ***F.s. caucae*** - Mountains of W Colombia. ***F.s. aequatorialis*** - Subtropical N Ecuador. ***F.s. peruvianus*** - Subtropical SW Ecuador, Peru and N Chile. ***F.s. fernandensis*** - Robinson Crusoe I (Más a Tierra), in Juan Fernández Is, off WC Chile. ***F.s. cinnamominus*** - SE Peru, Chile and Argentina S to Tierra del Fuego. ***F.s. cearae*** - Tablelands from NE Brazil S and W to E Bolivia.		

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Greater Kestrel *Falco rupicoloides* 3 subspecies *F.r. fieldi, F.r. arthuri, F.r. rupicoloides*	***F.r. fieldi*** - N & E Ethiopia, NW Somalia. ***F.r. arthuri*** - NE Tanzania, Kenya. ***F.r. rupicoloides*** - Namibia, Botswana, SW Zambia and Zimbabwe to South Africa.	NGT. CITES II.	Not recommended
Fox Kestrel *Falco alopex*	Senegambia E through N Cameroon and Sudan to Red Sea coast of Ethiopia, S to NE Zaire, NW Kenya and NE Uganda.	NGT. CITES II. Little studied and may be vulnerable through limited and localized breeding range on rocky hills, although these eminences are usually less subject to habitat degradation than the surrounding savanna.	Not recommended
Grey Kestrel *Falco ardosiaceus*	Senegambia E to Ethiopia and S through W Kenya and W Tanzania to Angola, N Zambia, N Namibia and NW Botswana.	NGT. CITES II.	Not recommended
Dickinson's Kestrel *Falco dickinsoni*	SC Africa, from Angola E through S Zaire to SC Tanzania (including Zanzibar and Pemba), and S to N Namibia, N Botswana and NE South Africa.	NGT. CITES II.	Not recommended
Banded Kestrel	Madagascar.	NGT. CITES II. Currently	Not recommended

Falco zoniventris		considered near-threatened. Locally common but habitat limited and declining through deforestation. Not more than 1000 pairs predicted as total population, but able to exist in secondary habitats in some areas. .	
Red-necked Falcon *Falco chicquera* 3 subspecies *F.c. chicquera,* *F.c. ruficollis,* *F.c. horsbrughi*	***F.c. chicquera*** - SE Iran E through Pakistan and India to Nepal and Bangladesh. ***F.c. ruficollis*** - Senegambia E to Ethiopia and S Somalia, then S to Zambia, Malawi and N Mozambique. ***F.c. horsbrughi*** - S of R Zambezi, from Zimbabwe and S Mozambique W to Botswana, Namibia and S Angola, and S to N South Africa.	NGT. CITES II.	Not recommended
Red-footed Falcon *Falco vespertinus*	E Europe, from Estonia and Hungary, E through NC Asia to extreme NW China and upper R Lena. Winters mainly in SW Africa, from Angola, Namibia and N South Africa through Botswana to Zimbabwe and Zambia.	NGT. CITES II. Marked decline, particularly in S of breeding range, probably due, directly or indirectly, to pesticide use.	Not recommended
Amur Falcon *Falco amurensis*	Transbaikalia (SE Siberia) and NE Mongolia E to Amurland and S to N & E China and N Korea; has bred in Assam (NE India). Winters in S Africa, mainly from Malawi to Transvaal.	NGT. CITES II. Size of population not known; may be stable; at least locally common, e.g. SE of L Baikal and in Mongolia.	Not recommended
Eleanora's Falcon *Falco eleonorae*	Islands and rocky coasts from Canary Is and NW Morocco E through Mediterranean to Lemnos, N Sporades, Cyclades, Dodecanese, Crete and Cyprus. Winters mainly in Madagascar, but also in E Africa and Mascarene Is.	NGT. CITES II.	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Sooty Falcon *Falco concolor*	E Libya through Egypt, Israel and Jordan to coasts of Red Sea and Persian Golf, E to SW Pakistan. Winters in Madagascar, and also in SE Africa.	NGT. CITES II. Numbers possibly stable.	Not recommended
Aplomado Falcon *Falco femoralis* 3 subspecies *F.f. septentrionalis,*	***F.f. septentrionalis*** - S USA (Arizona, New Mexico and Texas) S locally through Mexico to Guatemala. ***F.f. femoralis*** - Nicaragua and	NGT. CITES II. Virtually eliminated for poorly understood reasons in S USA and N Mexico;	Phase Out

F.f. femoralis, *F.f. pichinchae*	Belize through Panama to Colombia, E to the Guianas, and S through E Bolivia and Brazil to Argentina, extending S to Tierra del Fuego. ***F.f. pichinchae*** - Temperate zones of SW Colombia, Ecuador, Peru and W Bolivia S to N Chile and NW Argentina (Tucumán).		
Merlin *Falco columbarius* 9 subspecies *F.c. subaesalon,* *F.c. aesalon,* *F.c. insignis, F.c. pacificus,* *F.c. pallidus, F.c. lymani, F.c. suckleyi,* *F.c. columbarius,* *F.c. richardsoni*	***F.c. subaesalon*** - Iceland. ***F.c. aesalon*** - N Eurasia, from Faeroes E to C Siberia. ***F.c. insignis*** - Siberia, E of R Yenisey to R Kolyma. ***F.c. pacificus*** - Soviet Far E, inlcuding Sakhalin I. ***F.c. pallidus*** - Steppes of Asia, from near Aral Sea to Altai Mts. ***F.c. lymani*** - Mountains of C Asia, in Turkestan, E Russia, NW China and Mongolia. ***F.c. suckleyi*** - Pacific coast of North America, from Alaska and British Columbia to N Washington. ***F.c. columbarius*** - North America, from Alaska and British Columbia to N Washington. ***F.c. richardsoni*** - Great Plains of North America, from C Alberta S to Wyoming.	NGT. CITES II. Status of Asian races not satisfactorily documented. .	Phase Out
Bat Falcon *Falco rufigularis* 3 subspecies *F.r. petoensis, F.r. rufigularis,* *F.r. ophryophanes*	***F.r. petoensis*** - N Mexico (from Sonora E to Tamaulipas) S through Central America to Colombia, and W of Andes S to Ecuador. ***F.r. rufigularis*** - E Colombia E to the Guianas and Trinidad, and S to S Brazil and N Argentina. ***F.r. ophryophanes*** - Tableland of C Brazil (Piauí S to Mato Grosso, São Paulo and Paraná) and adjacent Bolivia, Paraguay and N Argentina.	NGT. CITES II.	Not recommended
Orange-breasted Falcon *Falco deiroleucus*	S Mexico S through Central America to Colombia, E to the Guianas and Trinidad, and E of Andes S through Brazil and Bolivia to Paraguay and N Argentina.	NGT. CITES II. Currently considered near-threatened. Sparse distribution throughout range and apparent sensitivity to deforestation suggest species requires careful attention. . Population of Guatemala and Belize possibly disjunct now from South American populations, and may merit special concern.	Not recommended

Eurasian Hobby *Falco subbuteo* 2 subspecies *F.s. subbuteo, F.s. streichi*	***F.s. subbuteo*** - NW Africa and Europe E through C Asia and N China to Kamchatka, Sakhalin and N Japan; winters in C & S Africa and S Asia. ***F.s. streichi*** - S & E China, S from Qin Ling Mts (S Shaanxi); possibly also N & E Burma and N Indochina.	NGT. CITES II. Population levels and trends not well known;	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
African Hobby *Falco cuvierii*	Senegambia E to Ethiopia and S to SE South Africa.	NGT. CITES II.	Not recommended
Oriental Hobby *Falco severus*	NW India and Nepal E to Yunnan, Guangdong and Hainan (S China), and S through Burma, Thailand and Indochina to Philippines, Java and Sulawesi, whence E through New Guinea to Solomon Is. Himalayan birds winter S to S India and Sri Lanka.	NGT. CITES II.	Not recommended
Australian Hobby *Falco longipennis* 2 subspecies *F.l. hanieli, F.l. longipennis*	***F.l. hanieli*** - Lesser Sundas, from Lombok to Timor. ***F.l. longipennis*** - Australia and Tasmania; outside breeding season occurs N to New Guinea, New Britain and Moluccas.	NGT. CITES II. Population probably stable; has benefited from introduced prey. Eggshell thickness significantly reduced by DDT use (now ceased); local breeding depression likely in S agricultural areas.	Not recommended
New Zealand Falcon *Falco novaeseelandiae*	New Zealand, Stewart I, Auckland Is.	NGT. CITES II. Currently considered near-threatened. Population declined through habitat destruction, persecution and effects of DDT, but now stable at c. 3000-4500 breeding pairs.	Not recommended
Brown Falcon *Falco berigora* 3 subspecies *F.b. novaeguineae, F.b. berigora, F.b. occidentalis*	***F.b. novaeguineae*** - C & E New Guinea and coastal N Australia. ***F.b. berigora*** - E, C & N Australia and Tasmania. ***F.b. occidentalis*** - SW & CW Australia.	NGT. CITES II.	Not recommended
Grey Falcon *Falco hypoleucos*	C & NW Australia	Rare. CITES II. Scarce and possibly declining; breeding zone has contracted to arid zone. Total population estimated at c. 1000 breeding pairs.	Not recommended
Black Falcon *Falco subniger*	C & E Australia.	NGT. CITES II.	Not recommended
Lanner Falcon *Falco biarmicus* 5 subspecies *F.b. feldeggii, F.b. erlangeri,*	***F.b. feldeggii*** - S Italy and Sicily E to Armenia and Azerbaijan, then S to Lebanon. ***F.b. erlangeri*** - NW Africa, from Mauritania to Morocco	NGT. CITES II.	Phase Out

F.b. tanypterus, F.b. abyssinicus, F.b. biarmicus	and Tunisia. ***F.b. tanypterus*** - NE Africa, including Egypt and N Sudan, to Arabia, Israel and Iraq. ***F.b. abyssinicus*** - Senegal and Ghana E to Ethiopia and Somalia, and S to Uganda and N Zaire. ***F.b. biarmicus*** - Angola, S Zaire and Kenya S to South Africa.		
Laggar Falcon *Falco jugger*	Pakistan E throughout most of India and Nepal to Assam and N Burma; absent from extreme S India. Also occurs locally in S Afghanistan and possibly SE Iran.	NGT. CITES II. Uncommon to rare and local. Population declines noted in Pakistan and W India probably due to reduction of prey available as result of extensive cultivation.	Phase Out
Saker Falcon *Falco cherrug* 2 subspecies *F.c. cherrug, F.c. milvipes*	***F.c. cherrug*** - C Europe E through SW Russia, Ukraine and Iran to R Yenisey and foothills of Altai; winters from Europe and NE Africa E to NW India. ***F.c. milvipes*** - SE Siberia, N Mongolia and N China S to W & C China; winters from Iran E to Nepal and NW India, Tibet and C China.	NGT. CITES II. Currently considered near-threatened.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5)</u>**	**TAG Recommendation**
Gyrfalcon *Falco rusticolus*	Circumpolar, occupying Artic regions of Eurasia, North America, Greenland and Iceland; some birds move farther S for winter.	NGT. CITES I. Currently considered near-threatened.	Phase Out
Prairie Falcon *Falco mexicanus*	SW Canada through W & WC USA to N Mexico; winters to EC USA and NC Mexico.	NGT. CITES II. Widely used in falconry, with no apparent effect on population.	Phase Out
Peregrine Falcon *Falco peregrinus* 19 subspecies *F.p. tundrius, F.p. anatum, F.p. pealei, F.p. cassini, F.p. japonensis, F.p. furuitii, F.p. calidus, F.p. peregrinus, F.p. brookei, F.p. babylonicus, F.p. pelegrinoides, F.p. madens, F.p. minor, F.p. radama,*	***F.p. tundrius*** - Arctic tundra of North America, from Alaska to Greenland. ***F.p. anatum*** - North America S of tundra to N Mexico, except NW Pacific Coast. ***F.p. pealei*** - Coastal W North America from Washington N to W Alaska, and W through Aleutian and Commander Is ; possibly also coastal Kamchatka and Kuril Is. ***F.p. cassini*** - W South America, from Ecuador (locally) S through Bolivia and N Argentina to S Chile, Tierra del Fuego and Falkland Is.	NGT. CITES I.	Monitored Program

F.p. peregrinator, F.p. ernesti, F.p. nesiotes, F.p. macropus, F.p. submelanogenys	***F.p. japonensis*** - NE Siberia S to Kamchatka and Japan (may not be race of coastal Kamchatka). ***F.p. furuitii*** - Volcano Is and possibly Bonin Is. ***F.p. calidus*** - Tundra of Eurasia, from Lapland E to NE Siberia, roughly to region of R Yana and R Indigirka. ***F.p. peregrinus*** - Eurasia S of tundra and N of Pyrenees, Balkans and Himalayas, from British Is E to Amurland and Ussuriland in Russian Far East. ***F.p. brookei*** - S France, Spain and coastal N Africa E through Mediterranean to Caucasus. ***F.p. babylonicus*** - Asia, from E Iran to Mongolia. ***F.p. pelegrinoides*** - Canary Is E through inland N Africa to Iraq, and probably Iran. ***F.p. madens*** - Cape Verde Is. ***F.p. minor*** - Africa S of Sahara, and N into extreme S Morocco. ***F.p. radama*** - Madagascar and Comoro Is. ***F.p. peregrinator*** - Pakistan, India and Sri Lanka E to SE China. ***F.p. ernesti*** - Indonesia and Philippines E to New Guinea and Bismarck Archipelago. ***F.p. nesiotes*** - Vanuatu and New Caledonia (race uncertain) E to Fiji. ***F.p. macropus*** - Australia (except SW). ***F.p. submelanogenys*** - SW Australia.		
Taita Falcon *Falco fasciinucha*	S Ethiopia through Kenya, Uganda, Tanzania, Malawi, E Zambia, SW Mozambique and Zimbabwe to NE South Africa.	NGT. CITES II. Currently considered near-threatened. Extremely localized and easily overlooked throughout most of its wide range, e.g. in Kenya, where not recently recorded from Taita (Teita) Hills, where originally collected.	Not recommended

FAMILY TYTONINAE

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Greater Sooty Owl *Tyto tenebricosa* *T.t. arfaki, T.t .tenebricosa*	***T.t. arfaki*** – New Guinea and Yapen I. ***T.t .tenebricosa*** - SE Australia	NGT. CITES II	Not recommended
Lesser Sooty Owl *Tyto multipunctata*	NE Queensland, from Cedar Bay S to Paluma and inland to Windsor, Atherton and Evelyn Tablelands	NGT. CITES II. Restricted range species. Currently considered near threatened.	Not recommended
Australian Masked Owl *Tyto novaehollandiae* *T.t calabyi, T.n. melvillensis, T.n. galei,* *T.n. kimberli, T.n. novaehollandiae,* *T.n. castanops*	***T.t calabyi*** – S New Guinea, in S Trans-Fly region, from Merauke area to Tarara and Daru I. ***T.n. melvillensis –*** Melville I and Bathurst I. ***T.n. galei*** – NE Cape York Pennisula to NE Queensland ***T.n. kimberli*** – N Australia ***T.n. novaehollandiae –*** SW Western Australia E to Victoria and N to NE to Queensland. ***T.n. castanops –*** Tasmania and Marie I	NGT. CITES II	Not recommended
Golden Masked Owl *Tyto aurantia*	New Britain	Vulnerable. CITES II. Restricted range species. Considered rare with few field records and sightings.	Not recommended
Manua Masked Owl *Tyto manusi*	Manus I and Admiralty Is.	Vulnerable. CITES II. Restricted range species. No recent records.	Not recommended
Lesser Masked Owl *Tyto sorocula* *T.s. cayelii, T.s. sororcula*	***T.s. cayelii –*** Buru, also Seram ***T.s. sororcula-*** Tanimbar Is.	NGT. CITES II. Restricted-range species.	Not recommended

Taliabu Masked Owl *Tyto nigrobrunnea*	Taliabu, in Sula Is.	Vulnerable. CITES II. Restricted range species. Presumed to be scarce.	Not recommended
Minahassa Masked Owl *Tyto inexspectata*	N & NC Sulawesi	NGT. CITES II. Restricted-range species.	Not recommended
Sulawesi Owl *Tyto rosenbergii* *T.r. rosenbergii, T.r. pelengensis*	***T.r. rosenbergii*** – Sulawesi and Sangihe ***T.r. pelengensis* –** Banggai Is.	NGT. CITES II. Widespread but generally uncommon in Sulawesi.	Not recommended
Common Barn Owl *Tyto alba* *26* subspecies including: *T.a.alba, T.a.delicatula, T.a. pratincola*	North America, Europe, Africa, South America, Australia, Malaysia	NGT. CITES II. Status of many populations uncertain particualry those on islands. Locally common in some areas and species expanding parts of it's range.	Monitored Program
Ashy-faced Owl *Tyto glaucops* *T.g.glaucops, T.g. nigrescens, T.g. insularis*	***T.g.glaucops* –** Hispaniola, including Tortue I. ***T.g. nigrescens* –** Dominica ***T.g. insularis* –** St. Vincent, Bequia, Union, Carriacou and Grenada.	NGT. CITES II. Restricted range species.	Not recommended
Madagascar Red Owl *Tyto soumagnei*	N & NE Madagascar	Endangered. CITES I.	Not recommended
African Grass Owl *Tyto capensis*	Cameroon highlands; Congo; N. Angola E to S Uganda and W Kenya, W Tanzania and Zambia to W Mozambique and E South Africa.	NGT. CITES II.	Not recommended
Common Name **Scientific Name**	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Eastern Grass Owl *Tyto longimembris* *T.l.longimembris, T.l. chinensis, T.l. pithecops, T.l. amuaronota, T.l. baliem, T.l. papuensis*	***T.l.longimembris* –** India, S Nepal, Bangladesh, Myanmar, Sulawesi, Tukangbesi, Is. , Flores, Sumba, and N, C & E Australia ***T.l. chinensis* –** SE China and Vietnam ***T.l. pithecops* –** Taiwan ***T.l. amuaronota* –** Philippines ***T.l. baliem* –** W New Guinea ***T.l. papuensis* –**E. New Guinea	NGT. CITES II.Rare to very rare throughout most of range.	Not recommended
Oriental Bay Owl *Phodilus badius* *P.b.saturatus, P.b. ripleyi, P.b. assimilis, P.b. badius, P.b. arixuthus, P.b. parvus*	***P.b.saturatus* –** Sikkim & NE India, N & C Myanmar, Thailand E to Vietnam and SE China ***P.b. ripleyi* –** SW India ***P.b. assimilis* –** C & S Sri Lanka ***P.b. badius* –** Malay Peninsula and Greater Sundas ***P.b. arixuthus* –** Natuna Is. ***P.b. parvus*** – Belitung I.	NGT. CITES II.	Phase Out
Congo Bay Owl	Itombe, Massif, extreme E.	Vulnerable. CITES II. Restricted-	Not recommended

Phodilus prigoginei	Zaire.	range species. Rare and elusive.	

FAMILY STRIGIDAE (TYPICAL OWLS)

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
White-fronted Scops-owl *Otus sagittatus*	S Myanmar (Tenasserim), S Thailand and Malay Peninsula; possibly Sumatra (status uncertain).	Vulnerable. CITES II. Described as rare or very rare and declining throughout its range, but very poorly known. Extensive lowland deforestation considered greatest threat to survival.	Not recommended
Reddish Scops-owl *Otus rufescens* 2 subspecies *O.r. malayensis, O.r. rufescens*	*O.r. malayensis* - S peninsular Thailand and peninsular Malaysia. *O.r. rufescens* - Sumatra, Bangka, Java and Borneo	NGT. CITES II. Rare throughout range, and probably declining in most parts, but elusive and little known.	Not recommended
Sandy Scops-owl *Otus icterorhynchus* 2 subspecies *O.i. icterorhynchus, O.i. holerythrus*	*O.i. icterorhynchus* - Liberia, Ivory Coast and Ghana. *O.i. holerythrus* - S Cameroon, N Congo and N & E Zaire; probably also N Gabon.	NGT. CITES II. Appears to be rare throughout its fragmented range; only 4 known specimens, 2 from each of Ghana and Cameroon. Assessment of status difficult, owing to its poorly documented distribution and biology.	Not recommended
Sokoke Scops-owl *Otus ireneae*	Sokoke-Arabuku Forest in SE Kenya, and NE Tanzania (lowlands N of E Usambara Mts).	Vulnerable. CITES I. Restricted-range species: present in Tanzania-Malawi Mountains EBA and East African Coastal Forests EBA. Conservation efforts impeded by lack of funding.	Not recommended
Andaman Scops-owl *Otus balli*	Andaman Is.	NGT. CITES II. Restricted-range species: present in Andaman Islands EBA. Currently considered near-threatened.	Not recommended
Flores Scops-owl *Otus alfredi*	Flores I, in Lesser Sundas.	NGT. CITES II. Restricted-range species: present in Northern Nusa Tenggara EBA. True status unknown, but almost certainly rare; probably not listed as threatened	Not recommended

		because true specific status misunderstood.	
Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Mountain Scops-owl *Otus spilocephalus* 8 subspecies *O.s. huttoni, O.s. spilocephalus, O.s. latouchi, O.s. hambroecki, O.s. siamensis, O.s. vulpes, O.s. vandewateri, O.s. luciae*	***O.s. huttoni*** - N Pakistan E to C Nepal. ***O.s. spilocephalus*** - C Nepal E to Arunachal Pradesh and Myanmar. ***O.s. latouchi*** - N Thailand and Laos to SE China and Hainan. ***O.s. hambroecki*** - Taiwan. ***O.s. siamensis*** - S Thailand to S Vietnam. ***O.s. vulpes*** - Malay Peninsula. ***O.s. vandewateri*** - Sumatra. ***O.s. luciae*** - Borneo	NGT. CITES II. Fairly adaptable; fact that species will occupy areas of dense regenerating growth at disturbed forest edge should aid its survival.	Not recommended
Rajah Scops-owl *Otus brookii* 2 subspecies *O.b. solokensis, O.b. brookii*	***O.b. solokensis*** - Sumatra. ***O.b. brookii*** - Borneo. Specimen collected in E Java (Ijen) assigned to this species, but identity disputed; may belong to another species of *Otus*.	NGT. CITES II. Restricted range species: present in Bornean Mountains EBA and Sumatra and Peninsular Malaysia EBA. Considered rare; possibly more widespread, but few observations within its known range.	Not recommended
Javan Scops-owl *Otus angelinae*	W Java.	Vulnerable. CITES II. Restricted range species: present in Java and Bali Forests EBA.	Not recommended
Mentawai Scops-owl *Otus mentawi*	Mentawai Is (Siberut to S Pagai), off W Sumatra.	NGT. CITES II. Status poorly known; appears to be rare and rather patchily distributed, but possibly locally common.	Not recommended
Indian Scops-owl *Otus bakkamoena* 5 subspecies *O.b. plumipes, O.b. deserticolor, O.b. gangeticus, O.b. Marathae, O.b. bakkamoena*	***O.b. plumipes*** - W Himalayas, from N Pakistan E to Nepal border. ***O.b. deserticolor*** - S Pakistan; possibly SE Iran; old record from Oman probably erroneous. ***O.b. gangeticus*** - NW India to lowland Nepal. ***O.b. marathae*** - C India, E to about S West Bengal. ***O.b. bakkamoena*** - SW & SE India and Sri Lanka.	NGT. CITES II.	Not recommended
Collared Scops-owl *Otus lettia* 5 subspecies *O.l. erythrocampe, O.l. ussuriensis, O.l. glabripes, O.l. umbratilis*	***O.l. lettia*** - E Nepal, E India (West Bengal) and Bangladesh, E to Assam, Myanmar, Thailand (except S peninsula) and Indochina. ***O.l. erythrocampe*** - SE China. ***O.l. ussuriensis*** - Sakhalin, Ussuriland and NE China. ***O.l. glabripes*** - Taiwan. ***O.l. umbratilis*** - Hainan I.	NGT. CITES II.	Not recommended
Sunda Scops-owl *Otus lempiji* 6 subspecies	***O.l. condorensis*** - S peninsular Thailand below Isthmus of Kra. ***O.l. lempiji*** - Malay Peninsula	NGT. CITES II. Would appear to benefit from conversion of forested land to agricultural uses, enabling	Not recommended

O.l. condorensis, O.l. lempiji, O.l. cnephaeus, O.l. hypnodes, O.l. lemurum, O.l. kangeanus	(except S), S Sumatra, Bangka, Belitung, Java, Bali, N Natuna Is, Borneo (except N). ***O.l. cnephaeus*** - S Malay Peninsula. ***O.l. hypnodes*** - N & C Sumatra. ***O.l. lemurum*** - N Borneo. ***O.l. kangeanus*** - Kangean Is.	possible range expansion.	
Japanese Scops-owl *Otus semitorques* 2 subspecies *O.s. semitorques, O.s. pryeri*	***O.s. semitorques*** - S Kuril Is (Urup S to Kunashir), and Hokkaido S to Yakushima, including Sado, Tsushima, Goto Is and Yakushima. ***O.s. pryeri*** - S Izu Is (Hachijo) and S Ryukyu Is .	NGT. CITES II. Race *preyeri* poorly known; although reported as abundant in Iriomote, this not substantiated by later observations. No obvious threats, and appears able to live in proximity to man.	Not recommended
Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Palawan Scops-owl *Otus fuliginosus*	Palawan I, in SW Philippines.	Vulnerable. CITES II. Restricted-range species: present in Palawan EBA. Said to be very rare.	Not recommended
Philippine Scops-owl *Otus megalotis* 4 subspecies *O.m. megalotis, O.m. everetti, O.m. nigrorum, O.m. boholensis*	***O.m. megalotis* - Luzon, Marinduque and Catanduanes.** ***O.m. everetti*** - Samar, Biliran, Leyte, Mindanao and Basilan. ***O.m. nigrorum*** - Negros. ***O.m. boholensis*** - Bohol.	NGT. CITES II. Few reliable data. Reports vary from probably endangered to widely distributed (on Mt Isarog), but very little is known about this species.	Not recommended
Wallace's Scops-owl *Otus silvicola*	Sumbawa and Flores, in Lesser Sundas	NGT. CITES II. Restricted-range species. Currently considered near-threatened.	Not recommended
Mindanao Scops-owl *Otus mirus*	Mindanao I, in S Philippines.	Vulnerable. CITES II. Restricted-range species	Not recommended
Luzon Scops-owl *Otus longicornis*	Luzon, in N Philippines.	Vulnerable. CITES II. Restricted-range species.	Not recommended
Mindoro Scops-owl *Otus mindorensis*	Mindoro, in NC Philippines.	Vulnerable. CITES II. Restricted-range species	Not recommended
Pallid Scops-owl *Otus brucei* 4 subspecies *O.b. brucei, O.b. obsoletus, O.b. semenowi, O.b. exiguus*	***O.b. brucei*** - E Aral Sea to Kirgizia and Tadjikistan. ***O.b. obsoletus*** - S Turkey, N Syria, N Iraq, Turkmeniya, Uzbekistan and N Afghanistan. ***O.b. semenowi*** - S Tadjikistan and W China (E to C Tarim Basin) S to E Afghanistan and N Pakistan. ***O.b. exiguus*** - Israel (extinct as breeder), C & E Iraq, S Iran, Oman, S Afghanistan, W Pakistan.	NGT. CITES II. Status not well known. May be reasonably common in much of range, but few data. No known threats.	Not recommended

African Scops-owl *Otus senegalensis* 5 subspecies *O.s. senegalensis, O.s. pamelae, O.s. socotranus, O.s. feae, O.s. nivosus*	***O.s. senegalensis*** - From Senegal and Sierra Leone E to NW Ethiopia and Somalia, S (except in SE Kenya) to SE South Africa. ***O.s. pamelae*** - S Saudi Arabia. ***O.s. socotranus*** - Socotra I. ***O.s. feae*** - Annobon I (Pagalu), in S Gulf of Guinea. ***O.s. nivosus*** - SE Kenya (lower Tana R to Lali Hills).	NGT. CITES II. Secretive habits make any accurate assessment of numbers difficult.	Not recommended
Eurasian Scops-owl *Otus scops* 6 subspecies *O.s. scops, O.s. pulchellus, O.s. mallorcae, O.s. cycladum, O.s. cyprius, O.s. turanicus*	***O.s. scops*** - France, Italy and C Mediterranean islands E to Volga R, S to N Greece, N Turkey and Transcaucasia; intergrades with *pulchellus.* ***O.s. pulchellus*** - Volga R E to L Baikal, S to Altai and Tien Shan. ***O.s. mallorcae*** - Iberia, Balearic Is, NW Africa (NC Morocco to Tunisia). ***O.s. cycladum*** - S Greece and S Asia Minor, S to C Israel and Jordan. ***O.s. cyprius*** - Cyprus. ***O.s. turanicus*** - Iraq and Iran (and perhaps this race SE Turkey) E to NW Pakistan.	NGT. CITES II.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Oriental Scops-owl *Otus sunia* 7 subspecies *O.s. sunia, O.s. rufipennis, O.s. leggei, O.s. modestus, O.s. malayanus, O.s. stictonotus, O.s. japonicus*	***O.s. sunia*** - N Pakistan E to Bangladesh, and N India. ***O.s. rufipennis*** - S India. ***O.s. leggei*** - Sri Lanka. ***O.s. modestus*** - Assam (S to Brahmaputra R), Myanmar, N & W Thailand, Indochina; also Andamans and C Nicobars (Camorta). ***O.s. malayanus*** - S China (Yunnan E to Guangdong). ***O.s. stictonotus*** - SE Siberia, Sakhalin, NE China, N Korea. ***O.s. japonicus* - Japan**.	NGT. CITES II. Varies in abundance regionally: scarce and very local in Pakistan, and scarece but more widespread in Sri Lanka, but fairly common in most of Indian Subcontinent; uncommon in Thailand; uncommon in Japan, but said to be commonest strigid in SE Siberia.	Not recommended
Flammulated Owl *Otus flammeolus*	Breeds from SW Canada (SC British Columbia) S to NW & SW USA and NE, W & C Mexico (and E in highlands to S Puebla, and NE Oaxaca). Winters to C & S Mexico and Guatemala, possibly El Salvador.	NGT. CITES II. Common in North America, but considered sensitive in USA and vulnerable in Canada.	Not recommended

Muluccan Scops-owl *Otus magicus* 7 subspecies *O.m. morotensis, O.m. leucospilus, O.m. obira, O.m. magicus, O.m. bouruensis, O.m. albiventris, O.m. tempestatis*	***O.m. morotensis*** - Morotai, Ternate. ***O.m. leucospilus*** - Halmahera, Kasiruta, Bacan. ***O.m. obira*** - Obi Is. ***O.m. magicus*** - Seram, Ambon. ***O.m. bouruensis*** - Buru. ***O.m. albiventris*** - Lombok, Sumbawa, Flores, Lomblen. ***O.m. tempestatis*** - Wetar.	NGT. CITES II. Considered common on Buru and uncommon on Sumbawa; no data on status from rest of range. Forest destruction probably a threat in the long term.	Not recommended
Mantanani Scops-owl *Otus mantananensis* 4 subspecies *O.m. romblonis, O.m. cuyensis, O.m. mantananensis, O.m. sibutuensis*	***O.m. romblonis*** - Banton, Sibuyan, Romblon, Tablas, Tres Reyes and Semirara, in C Philippines. ***O.m. cuyensis*** - S Calamian Is (Dicabaito, Linapacan) and Cuyo I. ***O.m. mantananensis*** - Mantanani I, off N Borneo, and islands off S coast of Palawan. ***O.m. sibutuensis*** - Sibutu and Tumindao, in SW Sulu Is.	NGT. CITES II. Restricted-range species.	Not recommended
Ryukyu Scops-owl *Otus elegans* 4 subspecies *O.e. elegans, O.e. interpositus, O.e. botelensis, O.e. calayensis*	***O.e. elegans*** - Throughout Ryukyu Is (Nansei Shoto), S Japan. ***O.e. interpositus*** - Daito Is (Minami-daito-jima). ***O.e. botelensis*** - Lanyu I, off SE Taiwan. ***O.e. calayensis*** - Batan Is, Sabtang and Calayan, off N Philippines.	NGT. CITES II. Restricted-range species.	Not recommended
Sulawesi Scops-owl *Otus manadensis* 5 subspecies *O.m. siaoensis, O.m. manadensis, O.m. mendeni, O.m. sulaensis, O.m. kalidupae*	***O.m. siaoensis*** - Siau I, N of Sulawesi. ***O.m. manadensis*** - Sulawesi. ***O.m. mendeni*** - Banggai Is (Peleng, perhaps also Labobo). ***O.m. sulaensis*** - Sula Is (Taliabu, Seho, Mangole, Sanana). ***O.m. kalidupae*** - Tukangbesi Is (Kaledupa).	NGT. CITES II. Two recent searches for *siaoensis,* known only from the type specimen, unsuccessful, and forest on Siau almost gone; no data on other populations, but all are poorly known and unlikely to be common. Main threat probably forest destruction.	Not recommended
Sangihe Scops-owl *Otus collari*	Sangihe I, N of Sulawesi.	NGT. CITES II.	Not recommended
Biak Scops-owl *Otus beccarii*	Biak I, off NW New Guinea (Irian Jaya).	NGT. CITES II. Very poorly known..	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Western Screech Owl *Otus kennicottii O.k.kennicotti, O.k.bendirei, O.k.*	Coast from SE Alaska & NW Canada. SW USA, Baja California, Mexico	NGT. CITES II Fairly common to locally common.	Phase Out

aikeni, O.k. cardonensis, O.k. xantusi, O.k. yumanensis, O.k. suttoni, O.k. vinaceus			
Balsas Screech-owl *Otus seductus*	SW Mexico, from S Jalisco and Colima to W Guerrero.	NGT. CITES II. Described as fairly common to common, but little information available on status and ecology. Available habitat appears to be decreasing. Currently being considered as candidate for inclusion in Red Data Book.	Not recommended
Pacific Screech-owl *Otus cooperi* 3 subspecies *O.c. lambi, O.c. chiapensis, O.c. cooperi*	***O.c. lambi*** - S Mexico (Pacific slope of Oaxaca). ***O.c. chiapensis*** - SE Mexico (Chiapas). ***O.c. cooperi*** - Extreme SE Mexico (S Chiapas) to NW Costa Rica (Guanacaste).	NGT. CITES II. Considered fairly common to common in most of range, but no information on population size.	Not recommended
Eastern Screech-owl *Otus asio* 6 subspecies *O.a. maxwelliae, O.a. naevius, O.a. asio, O.a. hasbroucki, O.a. floridanus, O.a. mccallii*	***O.a. maxwelliae*** - SC Canada and NC USA. ***O.a. naevius*** - SE Canada and NE USA (S to North Carolina). ***O.a. asio*** - Oklahoma E to South Carolna and Georgia. ***O.a. hasbroucki*** - C Oklahoma to Texas. ***O.a. floridanus*** - Louisiana to Florida. ***O.a. mccallii*** - S Texas to NE Mexico.	NGT. CITES II.	Phase Out
Whiskered Screech-owl *Otus trichopsis* 3 subspecies *O.t. aspersus, O.t. trichopsis, O.t. mesamericanus*	***O.t. aspersus*** - SE Arizona to N Mexico (Sonora and Chihuahua). ***O.t. trichopsis*** - Highlands of C Mexico (from about Durango S to Veracruz, Oaxaca and Chiapas). ***O.t. mesamericanus*** - SE Mexico (Chiapas) to NC Nicaragua.	NGT. CITES II. Population or trends little known, but clearly dependent on the future of fairly dense montane forest within its range.	Not recommended
Tropical Screech-owl *Otus choliba* 9 subspecies *O.c. luctisomus, O.c. margaritae, O.c. duidae, O.c. crucigerus, O.c. suturutus, O.c. decussatus, O.c. choliba, O.c. wetmorei, O.c. uruguaiensis*	***O.c. lucitisomus*** - Costa Rica to NW Colombia, including Pearl Is. ***O.c. margaritae*** - Margarita I, off N Venezuela. ***O.c. duidae*** - Duida Mts in S Venezuela. ***O.c. crucigerus*** - E Colombia and E Peru across to Venezuela, Trinidad, the Guianas and NE Brazil. ***O.c. suturutus*** - Bolivia. ***O.c. decussatus*** - C & E Brazil. ***O.c. choliba*** - S Brazil (S Mato Grosso, São Paulo) to E	NGT. CITES II. Widely distributed and rather common. Little is known, however, about its population levels and ecology.	Not recommended

	Paraguay. ***O.c. wetmorei*** - W Paraguay and N Argentina (S to Mendoza, N Buenos Aires and N Río Negro). ***O.c. uruguaiensis*** - NE Argentina, SE Brazil (Santa Catarina, Rio Grande do Sul) and Uruguay.		
Koepcke's Screech-owl *Otus koepckeae*	NW Peru (probably from around Amazonas, and Ancash S to Lima, possibly farther S, to Ayacucho or beyond); apparently also WC Bolivia (to La Paz). Distributional limits very imperfectly known.	NGT. CITES II. Very poorly known; no information on numerical status, ecology or biology. Warrants classification as Data-deficient.	Not recommended
Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Peruvian Screech-owl *Otus roboratus* 2 subspecies *O.r. pacificus, O.r. roboratus*	*O.r. pacificus* - SW Ecuador and extreme NW Peru (S to Lambayeque). *O.r. roboratus* - Extreme S Ecuador and NW Peru between W & C Andes (drainage of R Chinchipe and R Marañón).	NGT. CITES II. Can be very common locally, but overall rare and possibly vulnerable; both N and S limits of distribution, however, uncertain.	Not recommended
Bare-shanked Screech-owl *Otus clarkii*	Costa Rica S to extreme NW Colombia.	NGT. CITES II. Restricted-range speciesConsidered uncommon; little known about population level.	Not recommended
Bearded Screech-owl *Otus barbarus*	Highlands of S Mexico (Chiapas) and N Guatemala.	NGT. CITES II. Restricted-range species; present in North Central American Highlands EBA. Currently considered Near-threatened. Considered fairly common but very local. Population level unknown, but possibly decreasing	Not recommended
Rufescent Screech-owl *Otus ingens* 2 subspecies *O.i. venezuelanus, O.i. ingens*	***O.i. venezuelanus*** - N Colombia and NW Venezuela. ***O.i. ingens*** - Andes from NE Ecuador to WC Bolivia.	NGT. CITES II. Status is uncertain, and species little known; may be rare, unless overlooked.	Not recommended
Columbian Screech-owl *Otus columbianus*	W slopes of Andes from WC Colombia to NW Ecuador.	NGT. CITES II. Restricted-range species. Currently considered Near-threatened. Status uncertain, and species little known; may be rare. Forest destruction probably a threat, at least locally.	Not recommended
Cinnamon Screech-owl *Otus petersoni*	Cordillera del Cutucú in SE Ecuador S to La Peca region in NW Peru.	NGT. CITES II. Restricted-range species. Very poorly known, and no information on numbers; described as probably rare. Destruction of forest habitat probably a long-term threat.	Not recommended
Cloudforest	C & S Peru in Pasco (Cordillera	NGT. CITES II. Restricted-range	Not recommended

Screech-owl *Otus marshalli*	Yanachaga) and Cuzco (Cordillera Vilcabamba).	species: present in Peruvian East Andean Foothills EBA. Poorly known.	
Tawn-bellied Screech-owl *Otus watsonii* 2 subspecies *O.w. watsonii, O.w. usta*	***O.w. watsonii*** - Lowlands from E Colombia S to NE Peru and E (N of R Amazon) to Surinam and Amazonian Brazil. ***O.w. usta*** - e Peru and S Amazonian Brazil S to lowland forest of N Bolivia and N Mato Grosso.	NGT. CITES II. Status uncertain, and species poorly known..	Not recommended
Guatemalan Screech-owl *Otus guatemalae* 7 subspecies *O.g. tomlini, O.g. hastatus, O.g. cassini, O.g. fuscus, O.g. thompsoni, O.g. guatemalae, O.g. dacrysistactus*	***O.g. tomlini*** - NW Mexico (S Sonora and SW Chihuahua S to Sinaloa). ***O.g. hastatus*** - SW Sinaloa to Oaxaca. ***O.g. cassini*** - E Mexico (S Tamaulipas and N Veracruz). ***O.g. fuscus*** - Veracruz. ***O.g. thompsoni*** - Yucatán Peninsula and Cozumel I. ***O.g. guatemalae*** - SE Mexico (S Veracruz and NE Oaxaca) to Honduras. ***O.g. dacrysistactus*** - N Nicaragua.	NGT. CITES II. Little information available; appears to be not rare locally. Populations have probably declined as a result of forest destruction. Habitat loss a threat, at least in long term.	Not recommended
Vermiculated Screech-owl *Otus vermiculatus* 3 subspecies *O.v. vermiculatus, O.v. roraimae, O.v. napensis*	***O.v. vermiculatus*** - NE Costa Rica to NW Colombia, N Venezuela. ***O.v. roraimae*** - S Venezuela and N Brazil (mountain regions of Roraima, Duida and Neblina). ***O.v. napensis*** - E Ecuador to Peru, and N Bolivia.	NGT. CITES II. Needs almost solid forest. Very little information; possibly not rare locally. Forest destruction a threat, at least in long term.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Hoy's Screech-owl *Otus hoyi*	Mountains of S Bolivia (S from Cochabamba) and NW Argentina (S to Tucumán, possibly to Catamarca).	NGT. CITES II. .	Not recommended
Long-tufted Screech-owl *Otus sanctaecatarinae*	SE Brazil (Paraná, Santa Catarina, Rio Grande do Sul), NE Argentina (Misiones) and Uruguay.	NGT. CITES II. Generally overlooked, especially as a result of confusion with *O. atricapillus*. Loss of habitat through overgrazing, burning and tree-felling represents greatest threat to species.	Not recommended
Variable Screech-owl *Otus atricapillus*	SE Brazil (S Bahia and Goiás S to Santa Catarina), SE Paraguay and extreme NE Argentina (N Misiones).	NGT. CITES II. Species should be monitored because of the scale of habitat loss in its range; it seems to require fairly large areas of forest, and may not be able to survive in small remnant forest reserves.	Not recommended
Puerto Rican	***O.n. nudipes*** - Puerto Rico.	NTG. CITES II. Restricted-range	Not recommended

Screech-owl *Otus nudipes* 2 subspecies *O.n. nudipes, O.n. newtoni*	***O.n. newtoni*** - Vieques I off E Puerto Rico (1 record, probably extinct), and unconfirmed report from nearby Culebra I; also Virgin Is (St Thomas, St John, Tortola, Virgin Gorda, St Croix, probably Guana I).	species: present in Pureto Rico and the Virgin Islands EBA. Race *newtoni* extremely rare, possibly extinct.	
White-throated Screech-owl *Otus albogularis* 6 subspecies *O.a. obscurus, O.a. meridensis, O.a. macabrum, O.a. albogularis, O.a. aequatorialis, O.a. remotus*	***O.a. obscurus*** - Sierra de Perijá, in NW Venezuela. ***O.a. meridensis*** - Andes of W Venezuela. ***O.a. macabrum*** - C & W Andes from Colombia and Ecuador S to N Peru. ***O.a. albogularis*** - E Andes of Colombia and N Ecuador. ***O.a. aequatorialis*** - E Ecuador. ***O.a. remotus*** - E Andes from Peru S to C Bolivia (Cochabamba).	NGT. CITES II. Poorly known, but perhaps often overlooked ; probably common. Conservation priority considered low to medium.	Not recommended
Palau Owl *Pyrroglaux podarginus*	Palau Is (Babelthuap, Koror, Peleliu and Angaur).	NGT. CITES II. Restricted-range species: present in Palau EBA. Current status uncertain.	Not recommended
Cuban Screech-owl *Gymnoglaux lawrencii* 2 subspecies *G.l. exsul, G.l. lawrencii*	***G.l. exsul*** - W Cuba and I of Pines. ***G.l. lawrencii*** - C & E Cuba.	NGT. CITES II. Considered fairly common or common. Not well known, however, and more information needed on species' ecology and exact status.	Not recommended
Northern White-faced Owl *Ptilopsis leucotis*	Senegambia E to Somalia, S to N Zaire, N Uganda and C Kenya.	NGT. CITES II. * Genus merged with Otus	Phase Out
Southern White-faced Owl *Ptilopsis granti*	SE Gabon, C Congo, S Zaire, S Uganda and SW Kenya, S to S Namibia, N Cape Province and Natal.	NGT. CITES II. * Genus merged with Otus and species split	Phase Out
Giant Scops-owl *Mimizuku gurneyi*	S Philippines: Dinagat, Siargao and Mindanao; report of former presence on Marinduque not confirmed.	Endangered. CITES I. Restricted-range species: present in Mindanao and Eastern Visayas EBA. Appears to be rare in most of range, and thought to be a species that occurs at naturally low densities. Rapidly declining as a result of habitat destruction.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Great Horned Owl *Bubo virginianus* 12 subspecies *B.b. lagophonus, B.v. saturatus, B.v. pacificus, B.v. elachistus,*	North, Central and South America	NGT. CITES II. Widespread, but densities low; few population estimates. Population levels closely associated with prey availability:	Monitored Program

B.v. subarcticus, B.v. pallescens, B.v. heterocnemis, B.v. virginianus, B.v. mayensis, B.v. mesembrinus, B.v. nigrescens, B.v. nacurutu			
Magellanic Horned Owl *Bubo magellanicus*	From C Peru, W Bolivia and W Argentina, S to Tierra del Fuego and Cape Horn.	NGT. CITES II.	Not recommended
Eurasian Eagle-owl *Bubo bubo* 14 subspecies *B.b. hispanus, B.b. bubo, B.b. ruthenus, B.b. interpositus, B.b. sibiricus, B.b. yenisseensis, B.b. turcomanus, B.b. omissus, B.b. hemachalana, B.b. nikolskii, B.b. jakutensis, B.b. ussuriensis, B.b. kiautschensis, B.b. swinhoei*	***B.b. hispanus*** - Iberian Peninsula; formerly also Atlas Mts in NW Africa (probably extinct). ***B.b. bubo*** - Europe from N Spain and Scandinavia E to W Russia (E to about Gor'kiy). ***B.b. ruthenus*** - C European Russia E to foothills of Rual Mts, S to lower Volga basin. ***B.b. interpositus*** - From Romania and S Ukraine E to Volga delta, S to Middle East (S to C Israel and Jordan) and NW Iran. ***B.b. sibiricus*** - From W foothills of Urals E to R Ob, S to W Altai. ***B.b. yenisseensis*** - C Siberia from R Ob to L Baikal, S to Altai and N Mongolia. ***B.b. turcomanus*** - Steppes between lower R Volga and R Ural, E to Transbaikalia, and S to Kazakhstan, extreme NW China (Tarim Basin in NW Xinjiang) and W Mongolia. ***B.b. omissus*** - Turkmeniya to W China (Chinese Turkestan). ***B.b. hemachalana*** - From Pamirs and N Tien Shan S to Himalayas. ***B.b. nikolskii*** - E Iraq and Iran, Afghanistan, and N & W Pakistan. ***B.b. jakutensis*** - NE Siberia. ***B.b. ussuriensis*** - SE Siberia to NE China, Sakhalin, N Hokkaido and S Kuril Is. ***B.b. kiautschensis*** - From W & C China (S to Yunnan and Sichuan) E to Korea. ***B.b. swinhoei*** - SE China.	NGT. CITES II. Uncommon to scarce or rare throughout range.	Yellow SSP

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Rock Eagle-owl *Bubo bengalensis*	Indian Subcontinent (except Sri Lanka), N to foothills of Himalayas, and W Myanmar.	NGT. CITES II. No details on population levels; generally uncommon, but perhaps more common locally in N and C India. Further studies needed on ecology and biology.	Not recommended
Pharaoh Eagle-owl *Bubo ascalaphus* 2 subspecies *B.a. ascalaphus,* *B.a. desertorum*	***B.a. ascalaphus*** - NW Africa and N Egypt E to W Iraq. ***B.a. desertorum*** - Sahara S to Mauretania and Niger, E to Ethiopia, Arabia and S Iraq.	NGT. CITES II. Little information on population levels, but probably not uncommon in most of range.	Not recommended
Cape Eagle-owl *Bubo capensis* 3 subspecies *B.c. dillonii, B.c. mackinderi,* *B.c. capensis*	***B.c. dillonii*** - S Eritrea and Ethiopian Highlands. ***B.c. mackinderi*** - From WC Kenya S to Zimbabwe and W Mozambique. ***B.c. capensis*** - South Africa and extreme S Namibia.	NGT. CITES II. Generally uncommon to rare, and very local; more common in some places, e.g. Mau Plateau in SW Kenya	Not recommended
Spotted Eagle-owl *Bubo africanus* 3 subspecies *B.a. milesi, B.a. africanus, B.a. tanae*	***B.a. milesi*** - SW Arabia, Yemen and Oman. ***B.a. africanus*** - Gabon E to Zaire (S of rainforest), S Uganda and C Kenya, S to the Cape. ***B.a. tanae*** - R Tana and Lali Hills, in SE Kenya.	NGT. CITES II. Few data on densities.	Not recommended
Greyish Eagle-owl *Bubo cinerascens*	Senegambia E to Ethiopia and Somalia, S to Cameroon, N Uganda and N Kenya.	NGT. CITES II. Generally rather uncommon through most of range.	Not recommended
Fraser's Eagle-owl *Bubo poensis*	Liberia E to W Uganda, S through Congo basin to C Zaire and NW Angola; also Bioko (Fernanco Póo).	NGT. CITES II. Biology relatively unknown, and breeding undocumented.	Not recommended
Usambara Eagle-owl *Bubo vosseleri*	Usambara Mts of NE Tanzania; recently discovered in Uluguru Mts; also possible sighting in Nguru Mts.	Vulnerable. CITES II. Restricted-range species: present in Tanzania-Malawi Mountains EBA.	Not recommended
Forest Eagle-owl *Bubo nipalensis* 2 subspecies *B.m. nipalensis,* *B.n. blighi*	***B.n. nipalensis*** - Himalayas from N Uttar Pradesh E to SW China (Yunnan), S to Cambodia and Vietnam; also S India in Western Ghats and Tamil Nadu. ***B.n. blighi*** - Sri Lanka.	NGT. CITES II. Currently considered Near-threatened. Rare and local in Indian Subcontinent, including Sri Lanka; at best uncommon in Thailand; rare to very rare in other parts of range; in Myanmar, reported to be well distributed but much overlooked.	Not recommended
Barred Eagle-owl *Bubo sumatranus* 2 subspecies *B.s. sumatranus,* *B.s. strepitans*	***B.s. sumatranus*** - Extreme S Myanmar and peninsular Thailand S to Sumatra, including Bangka I. ***B.s. strepitans*** - Borneo, Java and Bali.	NGT. CITES II. Little information available. Ability to adapt to disturbed forest and to accept second-growth habitats suggested that species is not in any immediate danger.	Not recommended
Shelley's Eagle-owl *Bubo shelleyi*	Sierra Leone and Liberia E to Ghana, and S Cameroon and N Gabon E to N Zaire.	NGT. CITES II. Rare and very local throughout its range.	Not recommended

Verreaux's Eagle-owl (Milky Eagle Owl) *Bubo lacteus*	Tropical W Africa patichly from Senegal and C Mali E to Cameroon, and from C Sudan, N Ethiopia and Somalia S to South Africa.	NGT. CITES II.	Red SSP
Dusky Eagle-owl *Bubo coromandus* 2 subspecies *B.c. coromandus,* *B.c. klossi*	***B.c. coromandus*** - Pakistan, N & C India and S Nepal E to Assam and Bangladesh; apparently this race also in E China. ***B.c. klossi*** - W & S Myanmar, W Thailand.	NGT. CITES II.	Not recommended
Akun Eagle-owl *Bubo leucostictus*	Patchily from Sierra Leone and Liberia E to Nigeria and Cameroon, S to mouth of R Congo, Cabinda and probably NW Angola, and across N Zaire.	NGT. CITES II. Patchy distribution with restricted pattern of occurrence; usually considered uncommon. . More study needed to assess its status, and any possible impacts of logging.	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Philippine Eagle-owl *Bubo philippensis* 2 subspecies *B.p. philippensis,* *B.p. mindanensis*	***B.p. philippensis*** - Luzon and Catanduanes. ***B.p. mindanensis*** - Samar, Leyte and Mindanao; recently recorded on Bohol.	Endangered. CITES II. Rare; Rapid population decline due to extensive lowland habitat destruction, and possibly hunting.	Not recommended
Blakiston's Eagle-owl *Bubo blakistoni* 4 subspecies *B.b. piscivorus,* *B.b. doerriesi,* *B.b. karafutonis,* *B.b. blakistoni*	***B.b. piscivorus*** - W Manchuria (W of Great Khingan Mts). ***B.b. doerriesi*** - SE Siberia and extreme NE China, to Korean border. ***B.b. karafutonis*** - Sakhalin I. ***B.b. blakistoni*** - Hokkaido and S Kuril Is.	Endangered. CITES II. One of world's rarest owls. Numbers in Russia, including Sakhalin and S Kuril Is, estimated at 300-400 pairs in 1984.	Not recommended
Brown Fish-owl *Ketupa zeylonensis* 4 subspecies *K.z. semenowi,* *K.z. leschenault,* *K.z. zeylonensis,* *K.z. orientalis*	***K.z. semenowi*** - S Turkey, Israel (probably extinct) and N Syria to NW India. ***K.z. leschenault*** - India (S of Himalayas) E to Myanmar (except NE) and Thailand. ***K.z. zeylonensis*** - Sri Lanka. ***K.z. orientalis*** - NE Myanmar to SE China (Guangxi, Guangdong), S to Malay Peninsula, Indochina and Hainan I.	NGT. CITES II. Generally uncommon. Rare in W of range: in Middle East, either extinct or on the verge, with last confirmed sighting in mid 1970's, and none located in surveys in mid 1980's	Not recommended
Tawny Fish-owl *Ketupa flavipes*	Himalays from NW India, Nepal and Bhutan to NE India, E to C China and Taiwan, and S to N Bangladesh, NE Myanmar and S Indochina.	NGT. CITES II. Currently considered Near-threatened. In W, very rare and local to uncommon.	Not recommended

Buffy Fish-owl *Ketupa ketupu* 4 subspecies *K.k. aagaardi, K.k. ketupu, K.k. minor, K.k. pageli*	***K.k. aagaardi*** - S Assam to S Thailand and Vietnam. ***K.k. ketupu*** - Malay Peninsula, Riau Archipelago, Sumatra, Bangka, Belitung, Java, Bali, and Borneo (except NW). ***K.k. minor*** - Nias I, off W Sumatra. ***K.k. pageli*** - NW Borneo.	NGT. CITES II. Status poorly known; uncommon in Thailand; locally uncommon to more or less common in Malay Peninsula and SE Asia; common in Borneo.	Not recommended
Snowy Owl *Nyctea scandiaca*	Breeds from W & N Scandinavia E across N Russia and N Siberia, including Novaya Zemlya, to Chuktotski Peninsula, Anadyrland, N Koryakland and Commander Is; then North America in W Aleutians (Attu and Buldir), Hall I in Bering Sea, and from W Alaska E through N Canada to N Labrador, including Banks, Prince Patrick and N Ellesmere Is; also N Greenland. Has bred occasionally in Iceland and N Britain (Shetland Is).	NGT. CITES II. Generally uncommon to scarce. In North America, overall status presumed little changed	Yellow SSP
Pel's Fishing-owl *Scotopelia peli*	Locally from Senegambia E to Benin, and from Nigeria S across Congo Basin and C Africa to Botswana, Mozambique and NE South Africa; also SE Sudan, Ethiopia, S Somalia, Kenya and Tanzania; status in S Mali, Burkina Faso and S Niger unclear.	NGT. CITES II	Not recommended
Rufous Fishing-owl *Scotopelia ussheri*	Sierra Leone, Liberia, Ivory Coast and Ghana; possibly also Guinea.	Endangered. CITES II. Restricted-range species: present in Upper Guinea Forests EBA. Population unknown.	Not recommended
Vermiculated Fishing-owl *Scotopelia bouvieri*	Congo Basin in S Cameroon, Gabon, Central African Republic, Congo, Zaire, and extreme NW Angola; possibly SE Nigeria.	NGT. CITES II. Little is known about its biology	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5)</u>**	**TAG Recommendation**
Spotted Wood-owl *Strix seloputo* 3 subspecies *S.s. seloputo, S.s. baweana, S.s. wiepkeni*	***S.s. seloputo*** - S Myanmar and C Thailand S to Sumatra (Jambi) and Java. ***S.s. baweana*** - Bawean I, off N Java. ***S.s. wiepkeni*** - Calamian Is and Palawan, in W Philippines.	NGT. CITES II. Reports vary. Possibly overlooked as a result of its rather secretive habits, although species seems to occur at naturally low densities.	Not recommended
Mottled Wood-owl *Strix ocellata* 3 subspecies	***S.o. grisescens*** - From base of Himalayas in Pakistan S to about Rajasthan, and E to Bihar.	NGT. CITES II. Uncommon in India; no recent records from Pakistan, were extremely rare or	Not recommended

S.o. grisescens, S.o. grandis, S.o. ocellata	***S.o. grandis*** - S Gujarat (Saurashtra Peninsula). ***S.o. ocellata*** - Peninsular India. Apparently resident also in W Myanmar, but race undetermined.	possibly even extinct. Status in Myanmar uncertain; said to have been common in SW (Arakan) before 1950's, but no information since then.	
Brown Wood-owl *Strix leptogrammica* 14 subspecies *S.l. newarensis, S.l. ticehursti, S.l. caligata, S.l. laotiana, S.l. indranee, S.l. ochrogenys, S.l. maingayi, S.l. myrtha, S.l. nyctiphasma, S.l. niasensis, S.l. chaseni, S.l. vaga, S.l. leptogrammica, S.l. bartelsi*	Malaysia	NGT. CITES II. Uncommon throughout most of range in Indian Subcontinent, and rare and local in Bangladesh; rare in Java, where ongoing clearance of mountain forest represents a major threat; in rest of range appears to be uncommon to rare, and again suffering from forest destruction.	Not recommended
Tawny Owl *Strix aluco* 11 subspecies *S.a. aluco, S.a. siberiae, S.a. sylvatica, S.a. mauritanica, S.a. willkonskii, S.a. sanctinicolai, S.a. harmsi, S.a. biddulphi, S.a. nivicola, S.a. ma, S.a. yamadae*	***S.a. aluco*** - N & E Europe E to W Russia (Ural Mts), S to Alps, Balkans and Black Sea; intergrades with. ***S.a. siberiae*** - From Ural Mts to W Siberia. ***S.a. sylvatica*** - Britain, France and Iberia; probably this race also from S Italy and Greece E to W & C Turkey and Middle East; intergrades with *sanctinicolai.* ***S.a. mauritanica*** - NW Africa (Morocco to Tunisia). ***S.a. willkonskii*** - NE Turkey, Caucasus and NW Iran, E to Turkmeniya. ***S.a. sanctinicolai*** - NE Iraq and W Iran. ***S.a. harmsi*** - Turkestan. ***S.a. biddulphi*** - Pakistan and NW India. ***S.a. nivicola*** - Nepal E to SE China, S to N Myanmar and N Indochina. ***S.a. ma*** - NE China (Jilin) and Korea. ***S.a. yamadae*** - Taiwan.	NGT. CITES II. Thought rather uncommon in China.	Phase Out

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Hume's Owl *Strix butleri*	E & S Israel, Jordan, Sinai Peninsula and E Egypt (Red Sea mountains), and patchily in Arabian Peninsula (Saudi Arabia, Yemen and Oman); possibly still S Pakistan (Makran Coast), perhaps also S Iran.	NGT. CITES II.	Not recommended
Spotted Owl *Strix occidentalis* 3 subspecies *S.o. caurina, S.o. occidentalis, S.o. lucida*	North America and Mexico.	NGT. CITES II. Currently considered Near-threatened. Races *caurina* and *lucida* listed as threatened under US Endangered Species Act, *caurina* as endangered in Canada, *lucida* as threatened in Mexico; *occidentalis* listed as species of special concern by state of California.	Phase Out
Barred Owl *Strix varia* 4 subspecies *S.v. varia, S.v. helveola, S.v. georgica, S.v. sartorii*	North America and Mexico	NGT. CITES II. Status uncertainDependent on forest, requires at least some old-growth trees for nesting; has probably suffered in E & SE parts of range, where large stands of mature forests have been lumbered.	Phase Out
Fulvous Owl *Strix fulvescens*	S Mexico (E Oaxaca and Chiapas), Guatemala, Honduras and El Salvador.	NGT. CITES II. Restricted-range species: present in North Central American Highlands EBA. Little available information on species' ecology, but deforestation likely to have detrimental and possibly severe effect on its population size.	Not recommended
Rusty-barred Owl *Strix hylophila*	E & S Paraguay, SE Brazil (from Minas Gerais to Rio Grande do Sul) and extreme NE Argentina (Misiones).	NGT. CITES II. Generally rare; locally fairly common, e.g. in NE Argentina (Misiones). Major threat appears to be habitat loss, mainly through logging and burning of forest. Because of the scale of such habitat loss in all parts of its range, species should be carefully monitored.	Not recommended
Rufous-legged Owl *Strix rufipes* 2 subspecies *S.r. rufipes, S.r. sanborni*	*S.r. rufipes* - From Chile and extreme WC Argentina S to Tierra del Fuego. *S.r. sanborni* - Chiloe I, off SC Chile.	NGT. CITES II. Status uncertain, owing to rather elusive habits.	Not recommended
Chaco Owl *Strix chacoensis*	Chaco of S Bolivia (Santa Cruz), W Paraguay and N Argentina (S to Córdoba, San Luis and N La Pampa).	NGT. CITES II. No information on population size	Not recommended
Ural Owl *Strix uralensis* 8 subspecies *S.u. liturata, S.u.*	***S.u. liturata*** - N Europe and NW Russia (E to about Arkhangel'sk region), S to N Poland, Belarus and middle R	NGT. CITES II.	Not recommended

uralensis, *S.u. macroura, S.u. yenisseensis,* *S.u. nikolskii, S.u. japonica,* *S.u. hondoensis,* *S.u. fuscescens*	Volga. ***S.u. uralensis*** - From E European Russia E to Okhotsk coast. ***S.u. macroura*** - C & SE Europe (from Carpathian Mts S to Bulgaria, and in W Balkans). ***S.u. yenisseensis*** - C Siberian plateau. ***S.u. nikolskii*** - Transbaikalia E to Sakhalin, S to NE China and Korea. ***S.u. japonica*** - Hokkaido. ***S.u. hondoensis*** - N & C Honshu. ***S.u. fuscescens*** - S Honshu S to Kyushu.		

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Sichuan Wood-owl *Strix davidi*	C China: SE Qinghai and W & C Sichuan.	Vulnerable. CITES II. Restricted-range species: present in West Sichuan Mountains EBA. Apparently rare, but no quantitative data on population. Occurs in Jiuzhaigou Reserve, Sichuan. Threatened by extensive deforestation occuring within its range. Further research urgently required.	Not recommended
Great Grey Owl *Strix nebulosa* 2 subspecies *S.n. nebulosa, S.n. lapponica*	***S.n. nebulosa*** - North America, from C Alaska E to SW Quebec, S to EC California, N Idaho and NE Minnesota. ***S.n. lapponica*** - Eurasia, from Fenno-Scandia E to W Koryakland, S to Lithuania, N Mongolia, NE China and N Sakhalin.	NGT. CITES II. Populations fluctuate widely, but generally scarce, with food supply likely critical factor regulating numbers.	Phase Out
African Wood-owl *Strix woodfordii* 4 subspecies *S.w. nuchalis, S.w. umbrina,* *S.w. nigricantior,* *S.w. woodfordii*	***S.W. nuchalis*** - Senegambia E to S Sudan and Uganda, S to N Angola and Zaire (except S & E), including Bioko I. ***S.w. umbrina*** - Ethiopia and SE Sudan. ***S.w. nigricantior*** - S Somalia, Kenya, Tanzania, Zanzibar and E Zaire. ***S.w. woodfordii*** - S Angola and S Zaire E to SW Tanzania, S to N Botswana and the Cape.	NGT. CITES II	Not recommended
Mottled Owl *Strix virgata* 7 subspecies *S.v. squamulata,*	Mexico, Central and South America	NGT. CITES II. Rather widespread, and considered fairly common to common in some places.	Phase-out

S.v. tamaulipensis, S.v. centralis, S.v. virgata, S.v. macconnelli, S.v. superciliaris, S.v. borelliana			
Black-and-white Owl *Strix nigrolineata*	C Mexico to NW Venezuela, W Colombia and W Ecuador and extreme NW Peru.	NGT. CITES II. Forest clearance a likely threat; extensive use of pesticides may also affect it.	Not recommended
Black-banded Owl *Strix huhula* 2 subspecies *S.h. huhula, S.h. albomarginata*	***S.h. huhula*** - E Colombia, S Venezuela and the Guianas to NE Brazil, S to E Peru, NW Argentina, N Paraguay and E Brazil. ***S.h. albomarginata*** - SE Brazil, E Paraguay and NE Argentina (Misiones).	NGT. CITES II. Appears to be scarce throughout entire range	Not recommended
Rufous-banded Owl *Strix albitarsis*	Andes from N Venezuela S to W & C Bolivia.	NGT. CITES II. Status uncertain; locally fairly common, but few reliable data. Probably adversely affected by cutting of forest habitat.	Not recommended
Maned Owl *Jubula lettii*	Liberia, Ivory Coast and Ghana; and patchily from S Cameroon and Ngabon to E Zaire.	NGT. CITES II. Very poorly known; status difficult to assess owing to species' secretive and nocturnal habits, and because of scant information on its biology.	Not recommended
Crested Owl *Lophostrix cristata* 3 subspecies *L.c. stricklandi, L.c. wedeli, L.c. cristata*	***L.c. stricklandi*** - S Mexico to W Panama and W Colombia. ***L.c. wedeli*** - E Panama to NE Colombia and NW Venezuela ; possibly also N Venezuela (1 specimen from Aragua). ***L.c. cristata*** - S Venezuela and the Guianas to N Brazil (W Pará), S through Amazonia to N Bolivia and N Mato Grosso, then W to SW Colombia, E Ecuador and E Peru.	NGT. CITES II. Very poorly known	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Spectacled Owl *Pulsatrix perspicillata* 6 subspecies *P.p. saturata, P.p. chapmani, P.p. trinitatis, P.p. perspicillata, P.p. boliviana, P.p. pulsatrix*	Mexico, Costa Rica and South America	NGT. CITES II.	Yellow SSP
Tawny-browed Owl *Pulsatrix koeniswaldiana*	E Paraguay, extreme NE Argentina (Misiones), and S Brazil (from Espírito Santo S to Santa Catarina).	NGT. CITES II. Restricted-range species: present in Atlantic Forest Lowlands EBA.	Not recommended
Band-bellied Owl	***P.m. melanota*** - Possibly SE	NGT. CITES II. Very poorly	Not recommended

Pulsatrix melanota 2 subspecies *P.m. melanota, P.m. philoscia*	Colombia; E Ecuador, and N Peru to SE Peru. ***P.m. philoscia*** - WC Bolivia.	known; considered relatively rare, and very few reliable records, although apparent rarity possibly due partly to species' nocturnal habits and seldom penetrated forest habitats	
Northern Hawk-owl *Surnia ulula* 3 subspecies *S.u. ulula, S.u. tianschanica, S.u. caparoch*	***S.u. ulula*** - N Eurasia E to Kamchatka and Sakhalin, C Siberia S to Tarbagatay. ***S.u. tianschanica*** - C Asia and NW & NE China, possibly also N Mongolia. ***S.u. caparoch*** - Alaska through Canada to Newfoundland, S to extreme N USA.	NGT. CITES II. Numbers fluctuate markedly with abundance of small rodents.	Not recommended
Eurasian Pygmy-owl *Glaucidium passerinum* 2 subspecies *G.p. passerinum, G.p. orientale*	***G.p. passerinum*** - From Scandinavia and mountains of S, C & E Europe E across NW & C Russia and Siberia to Sakhalin and NE China. ***G.p. orientale*** - C & E Siberia.	NGT. CITES II	Not recommended
Collared Owlet *Glaucidium brodiei* 4 subspecies *G.b. brodiei, G.b. pardalotum, G.b. peritum, G.b. borneense*	***G.b. brodiei*** - From N Pakistan through Himalayas to SE Tibet, N Indochina, S, C & E China (including Hainan), and S to Malaysia. ***G.b. pardalotum*** - Taiwan. ***G.b. peritum*** - Sumatra. ***G.b. borneense*** - Borneo.	NGT. CITES II. Mainly a forest bird, only occasionally observed near human habitation, so presumably vulnerable to effects of habitat destruction.	Not recommended
Pearl-spotted Owlet *Glaucidium perlatum* 2 subspecies *G.p. perlatum, G.p. licua*	***G.p. perlatum*** - Senegambia to W Sudan; possibly also Liberia. ***G.p. licua*** - E Sudan, Ethiopia and Uganda S to N & E South Africa, Angola and Namibia.	NGT. CITES II.	Not recommended
Northern Pygmy-owl *Glaucidium californicum* 4 subspecies *G.c. grinnelli, G.c. swarthi, G.c. californicum, G.c. pinicola*	***G.c. grinnelli*** - SE Alaska through coastal British Columbia S to coastal W USA (Washington, Oregon, California). ***G.c. swarthi*** - Vancouver I. ***G.c. californicum*** - British Columbia and Alberta to W USA (S to Nevada and California) and NW Mexico (N Sonora, NW Chihuahua). ***G.c. pinicola*** - W USA (Idaho and Montana S to Arizona and New Mexico, E to Colorado).	NGT. CITES II.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Mountain Pygmy-	From SE Arizona S through	NGT. CITES II	Not recommended

owl *Glaucidium gnoma*	interior highlands of Mexico (from Chihuahua and Coahuila S to Oaxaca).		
Guatemalan Pygmy-owl *Glaucidium cobanense*	S Mexico (Chiapas), Guatemala and Honduras.	NGT. CITES II. Restricted-range species: present in North Central American highlands EBA. Little known about ecology and population status. Forest destruction a possible threat.	Not recommended
Baja Pygmy-owl *Glaucidium hoskinsii*	S Baja California (Mexico): Sierra Victoria, probably also Sierra de la Giganta.	NGT. CITES II. Restricted-range species: present in Baja California EBA. Little known about ecology and population status.	Not recommended
Costa Rican Pygmy-owl *Glaucidium costaricanum*	C Costa Rica to W Panama, possibly to E Panama.	NGT. CITES II. Restricted-range species: present in Costa Rica and Panama highlands EBA. Rare in Panama.	Not recommended
Cloudforest Pygmy-owl *Glaucidium nubicola*	W slope of Andes in Colombia (Cordillera Central) and Ecuador.	NGT. CITES II. Species little known, and no data on population level. Continuing forest destruction and degradation a major threat.	Not recommended
Andean Pygmy-owl *Glaucidium jardinii*	From N Colombia and W Venezuela S through Ecuador to C Peru.	NGT. CITES II. Needs at least patchy forest, but little information available; probably vulnerable to forest destruction.	Not recommended
Yungas Pygmy-owl *Glaucidium bolivianum*	E slope of Andes in SE Peru, WC Bolivia and NW Argentina.	NGT. CITES II.	Not recommended
Colima Pygmy-owl *Glaucidium palmarum* 3 subspecies *G.p. oberholseri, G.p. palmarum, G.p. griscomi*	***G.p. oberholseri*** - S Sonora to S Sinaloa (NW Mexico). ***G.p. palmarum*** - Nayarit to Oaxaca (C Mexico). ***G.p. griscomi*** - SW Morelos and NE Guerrero (C Mexico).	NGT. CITES II.	Not recommended
Tamaulipas Pygmy-owl *Glaucidium sanchezi*	NE Mexico (S Tamaulipas, SE San Luis Potosí and extreme N Hidalgo).	NGT. CITES II. Restricted-range species: present in Southern Sierra Madre Oriental EBA.	Not recommended
Central American Pygmy-owl *Glaucidium griseiceps* 3 subspecies *G.g. occultum, G.g. griseiceps, G.g. rarum*	***G.g. occultum*** - S Mexico (SE Veracruz, N Oaxaca and Chiapas). ***G.g. griseiceps*** - Guatemala, Belize and Honduras. ***G.g. rarum*** - Costa Rica and Panama.	NGT. CITES II. Generally little known	Not recommended
Subtropical Pygmy-owl *Glaucidium parkeri*	E slope of Andes in Ecuador and Peru; possibly N to SW Colombia, possibly also extending farther S into N Bolivia.	NGT. CITES II. Considered uncommon	Not recommended
Amazonian Pygmy-owl *Glaucidium hardyi*	From SE Venezuela (Bolívar) E through the Guianas to N Brazil (Pará), and S to SE Peru, N & E	NGT. CITES II. Generally considered uncommon, but may well be overlooked as it lives high	Not recommended

	Bolivia and S Mato Grosso.	up in forest; often kept as pet by native tribes. Vulnerable to forest destruction throughout range.	
Least Pygmy-owl *Glaucidium minutissimum*	E Paraguay, S & E Brazil and possibly NE Argentina (Misiones).	NGT. CITES II. Possibly rare, though sometimes adopted as pet by native people; perhaps escapes attention because of less accessible, more forested habitat. Habitat destruction probably represents a serious threat.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Ferruginous Pygmy-owl *Glaucidium brasilianum* 12 subspecies *G.b. cactorum, G.b. saturatum, G.b. ridgwayi, G.b. medianum, G.b. margaritae, G.b. phalaenoids, G.b. duidae, G.b. olivaceum, G.b. ucayalae, G.b. brasilianum, G.b. pallens, G.b. stranecki*	North America, South America, Trinidad, Mexico	NGT. CITES II. In USA, has declined drastically during 20th century	Phase Out
Tucuman Pygmy-owl *Glaucidium tucumanum*	NW Argentina from Salta and Tucumán to at least Córdoba.	NGT. CITES II. Status uncertain, but probably not uncommon locally. Habitat destruction the main threat.	Not recommended
Peruvian Pygmy-owl *Glaucidium peruanum*	W Ecuador (Manabí) S through W Peru to N Chile; also E of Andes in extreme SE Ecuador (Zamora-Chinchipe) and Marañón drainage of Peru.	NGT. CITES II.	Not recommended
Austral Pygmy-owl *Glaucidium nanum*	Breeds S Chile and S Argentina S to Tierra del Fuego, some wintering farther N in Chile and Argentina.	NGT. CITES II.	Not recommended
Cuban Pygmy-owl *Glaucidium siju* 2 subspecies *G.s. siju, G.s. vittatum*	***G.s. siju*** - Cuba. ***G.s. vittatum*** - I of Pines.	NGT. CITES II.	Not recommended
Red-chested Owlet *Glaucidium tephronotum* 4 subspecies *G.t. tephronotum, G.t. pycrafti, G.t. medje, G.t.*	***G.t. tephronotum*** - Liberia, Ivory Coast and Ghana. ***G.t. pycrafti*** - Cameroon. ***G.t. medje*** - Congo Basin, E Zaire and SW Uganda. ***G.t. elgonense*** - E Uganda and W Kenya.	NGT. CITES II. Rare and hard to locate.	Not recommended

elgonense			
Sjostedt's Owlet *Glaucidium sjostedti*	Cameroon, Gabon, N Congo, S Central African Republic and NW & C Zaire.	NGT. CITES II. Uncommon in most of range	Not recommended
Asian Barred Owlet *Glaucidium cuculoides* 8 subspecies *G.c. cuculoides, G.c. austerum, G.c. rufescens, G.c. bruegeli, G.c. delacouri, G.c. deignani, G.c. whitelyi, G.c. persimile*	***G.c. cuculoides*** - Himalayas from NE Pakistan and Kashmir E to W Sikkim. ***G.c. austerum*** - E Sikkim, Bhutan, NE Assam and NW Myanmar. ***G.c. rufescens*** - NE India, Bangladesh and N Myanmar. ***G.c. bruegeli*** - S Myanmar and S Thailand. ***G.c. delacouri*** - N Indochina. ***G.c. deignani*** - SE Thailand and S Indochina. ***G.c. whitelyi*** - W, C & SE China and NE Vietnam. ***G.c. persimile*** - Hainan.	NGT. CITES II.	Not recommended
Javan Owlet *Glaucidium castanopterum*	Java and Bali.	NGT. CITES II. Little information available; ecology and tolerance of human activities may be similar to those of *G. cuculoides*; detailed information much desired. Habitat loss probably main threat.	Not recommended
Jungle Owlet *Glaucidium radiatum* 2 subspecies *G.r. radiatum, G.r. malabaricum*	***G.r. radiatum*** - Himalayas from Himachal Pradesh E to Bhutan, Bangladesh and possibly W Myanmar, and S through India; also Sri Lanka. ***G.r. malabaricum*** - SW India.	NGT. CITES II. Status poorly known. Common in Sri Lanka, but suffering under deforestation	Not recommended

Common Name **Scientific Name**	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Chestnut-backed Owlet *Glaucidium castanonotum*	Sri Lanka.	NGT. CITES II. Restricted-range species: present in Sri Lanka EBA. Currently considered Near-threatened.	Not recommended
African Barred Owlet *Glaucidium capense* 3 subspecies *G.c. scheffleri, G.c. ngamiense, G.c. capense*	***G.c. scheffleri*** - Extreme S Somalia and E Kenya to NE Tanzania. ***G.c. ngamiense*** - C Tanzania and SE Zaire across to S Angola, S to N Namibia, N Botswana, E Transvaal and SC Mozambique; also Mafia I. ***G.c. capense*** - From S Mozambique S to E Cape.	NGT. CITES II. Threatened by habitat destruction, bush clearance for agriculture occurring at alarming rate; especially dangerous to survival since ecology and exact habitat affinities so poorly understood.	Not recommended
Chestnut Owlet *Glaucidium casteneum* 2 subspecies *G.c. etchecopari, G.c. castaneum*	***G.c. etchecopari*** - Patchily in Liberia and Ivory Coast. ***G.c. castaneum*** - NE Zaire (Semliki Valley) and SW Uganda (Bwamba Forest).	NGT. CITES II. Status of nominate race uncertain. W African population isolated; considered uncommon to locally not uncommon in Liberia, and widespread and common in Ivory	Not recommended

		Coast; likely to occur in Ghana, requires investigation.	
Albertine Owlet *Glaucidium albertinum*	Albertine Rift in E Zaire and N Rwanda.	Vulnerable. CITES II. Restricted-range species Surviving numbers not known, but small number of specimens collected from an area well explored by ornithologists suggests that it is rare.	Not recommended
Long-whiskered Owlet *Xenoglaux loweryi*	N Peru (Río Mayo valley, NW San Martín).	NGT. CITES II. Restricted-range species: present in Andean Ridge-top Forests EBA. Currently considered Near-threatened.	Not recommended
Elf Owl *Micrathene whitneyi* 4 subspecies *M.w. whitneyi, M.w. idonea, M.w. sanfordi, M.w. graysoni*	***M.w. whitneyi*** - Breeds SW USA (extreme S Nevada, SE California, C Arizona, SW New Mexico and SW Texas) S to NW Mexico (Sonora). ***M.w. idonea*** - S Texas S to C Mexico (S to Puebla, W to Guanajuato). ***M.w. sanfordi*** - S Baja California and parts of Mexican mainland. ***M.w. graysoni*** - Revillagigedo Is (Socorro I).	NGT. CITES II. Almost extirpated in California, where classed as endangered by California Department of Fish and Game; however, species not included on federal or state lists of endangered and threatened species, nor under review for such listing .	Phase Out
Spotted Owlet *Athene brama* 4 subspecies *A.b. albida, A.b. indica, A.b. brama, A.b. pulchra*	***A.b. albida*** - S Iran and S Pakistan; possibly also S Afghanistan. ***A.b. indica*** - N & C Indian Subcontinent. ***A.b. brama*** - S India. ***A.b. pulchra -*** Myanmar, Thailand (except S half of peninsula), S Laos, Cambodia and S Vietnam.	NGT. CITES II. Common over most of range, though rare in S Vietnam.	Not recommended
Forest Owlet *Athene blewitti*	WC & EC India: plains and low foothills of Akrani Range (W end of Satpura Mts) near Tapi (Tapti) R in NW Maharashtra (formerly W Khandesh), and probably in E Madhya Pradesh and W Orissa (no records in 20th century from last two).	Critically Endangered. CITES I.	Not recommended
Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Little Owl *Athene noctua* 13 subspecies *A.n. vidalii, A.n. noctua, A.n. indigena, A.n. glaux, A.n. saharae,*	***A.n. vidalii*** - W & N Europe (S Baltic S to Iberia, including Balearic Is) E to NW Russia. ***A.n. noctua*** - C Europe (from about S Germany) S to Sardinia and Sicily, E to Romania. ***A.n. indigena*** - Albania, SE Yugoslavia, S & E Romania, S	NGT. CITES II. Population fluctuates, especially in N of range, where marked decreases recorded after severe winters.	Not recommended

A.n. spilogastra, A.n. somaliensis, A.n. lilith, A.n. bactriana, A.n. orientalis, A.n. impasta, A.n. ludlowi, A.n. plumipes	Ukraine, S Russia, Caucasus and SW Siberia, S to Crete, Turkey (except SE) and Middle East (S to Haifa). ***A.n. glaux*** - N Africa, and coastal Israel S from Haifa. ***A.n. saharae*** - N & C Sahara (S to Mauritania, Mali, Niger, Chad and Sudan), E discontinuously into Arabian Peninsula. ***A.n. spilogastra*** - E Sudan, N Ethiopia. ***A.n. somaliensis*** - E Ethiopia, Somalia. ***A.n. lilith*** - Cyprus, and inland Middle Est from SE Turkey S to S Sinai. ***A.n. bactriana*** - From SE Azerbaijan, E Iraq, Iran and Afghanistan E through C Asia to L Balkhash. ***A.n. orientalis*** - Extreme NW China and adjacent Siberia. ***A.n. impasta*** - Kokonor, W Gansu. ***A.n. ludlowi*** - SC China and S & E Tibet, S to N Himalayas. ***A.n. plumipes*** - NE China, Mongolia and Ussuriland. Introduced (*vidalii*), just outside natural range, to Britain; also introduced (*vidalii*) to New Zealand.		
Burrowing Owl *Athene cunicularia* 19 subspecies *A.c. hypugaea, A.c. rostrata, A.c. floridana, A.c. troglodytes, A.c. arubensis, A.c. brachyptera, A.c. apurensis, A.c. minor, A.c. carrikeri, A.c. tolimae, A.c. pichinchae, A.c. punensis, A.c. intermedia, A.c. nanodes, A.c. juniensis, A.c. boliviana, A.c. grallaria, A.c. partridgei, A.c. cunicularia*	North America, Venezuela, Colombia, Ecuduar, Bolivia, Argentina, Brazil, Peru, Cuba, Bahamas	NGT. CITES II. Listed as endangered in Minnesota and Iowa, and species of special concern in Washington, Oregon, California, Montana, Idaho, Wyoming, Utah, North and South Dakota, Oklahoma and Florida; designated as endangered in British Columbia and Manitoba, and threatened in Alberta and Saskatchewan	Yellow SSP

Common Name Scientific Name	Range	Status in Wild (from Handbook to the Birds of the World vol. 2& 5)	TAG Recommendation
Boreal Owl *Aegolius funereus* 6 subspecies *A.f. funereus, A.f. caucasicus, A.f. pallens, A.f. magnus, A.f. beickianus, A.f. richardsoni*	***A.f. funereus*** - Europe from N Scandinavia S to Pyrenees and then E to Urals, excluding Caucasus. ***A.f. caucasicus*** - Caucasus; possibly this race or nominate in N Turkey. ***A.f. pallens*** - W Siberia, Tien Shan, and S Siberia E through NE China (Heilongjiang) to Russian Far East (including Sakhalin). ***A.f. magnus*** - NE Siberia, from Kolyma to Kamchatka. ***A.f. beickianus*** - NW India (Lahul) and W China (Qinghai). ***A.f. richardsoni*** - North America (from C Alaska S to W USA, and E through Canada to Labrador).	NGT. CITES II.	Not recommended
Northern Saw-whet Owl *Aegolius acadicus* 2 subspecies *A.a. acadicus, A.a. brooksi*	***A.a. acadicus*** - From S Alaska S to S USA, E to SE Canada and N Florida; also highlands of Mexico from NE Sonora to C Michoacán, E in C highlands to Puebla, Hidalgo and C Oaxaca, with isolated population in SE Coahuila, SW Nuevo León and N San Luis Potosí. ***A.a. brooksi*** - Queen Charlotte Is (British Columbia).	NGT. CITES II. World population conservatively estimated at 100,000-300,000 individuals. No data on trends, but probably declining slowly as habitat lost	Phase Out
Unspotted Saw-whet Owl *Aegolius ridgwayi* 3 subspecies *A.r. tacanensis, A.r. rostratus, A.r. ridgwayi*	***A.r. tacanensis*** - S Mexico (Chiapas). ***A.r. rostratus*** - Guatemala; Honduras and El Salvador (presumed this race). ***A.r. ridgwayi*** - Costa Rica and W Panama.	NGT. CITES II. Currently considered Near-threatened. Generally considered uncommon	Not recommended
Buff-fronted Owl *Aegolius harrisii* 3 subspecies *A.h. harrisii, A.h. iheringi, A.h. dabbenei*	***A.h. harrisii*** - Andes from NW Venezuela S to NC Peru. ***A.h. iheringi*** - E Bolivia, Paraguay, C & E Brazil (Ceará to Rio Grande do Sul), S to NE Argentina and NE Uruguay. ***A.h. dabbenei*** - NW Argentina (Tucumán, Salta and Jujuy); also (possibly this race) W Bolivia.	NGT. CITES II. Currently considered Near-threatened. Considered generally rare throughout range, but very few data. Placed on preliminary "Blue List" in Colombia, where population believed to be declining	Not recommended

	.		
Rufous Owl *Ninox rufa* 4 subspecies *N.r. humeralis, N.r. rufa, N.r. meesi, N.r. queenslandica*	***N.r. humeralis*** - New Guinea, including Aru and Waigeo Is. ***N.r. rufa*** - NE Western Australia (Kimberleys) and N Northern Territory (Arnhem Land). ***N.r. meesi*** - Coastal and subcoastal Cape York, S in Queensland to about R Endeavour and R Mitchell. ***N.r. queenslandica*** - Coastal and subcoastal Queensland from R Endeavour S to lower R Burdekin and perhaps Rockhampton.	NGT. CITES II. Subspecies *queenslandica* given as rare in Australian national listing and vulnerable in Queensland state listing, c. 1000 pairs estimated; *meesi* as rare in Queensland. Uncommon to rare and sparsely distributed in New Guinea; some pressure from traditional hunting. In Australia, adversely affected by forest clearance and, perhaps, by increasing numbers of hot first late in dry season.	Not recommended
Powerful Owl *Ninox strenua*	Coastal and subcoastal SE Queensland (S from R Dawson), E New South Wales and SE Victoria to extreme SE South Australia.	Vulnerable. CITES II. Listed as rare or vulnerable in Australian national listing and by 3 main states in which it occurs (Queensland, New South Wales and Victoria	Not recommended
Sumba Boobook *Ninox rudolfi*	Sumba I, in C Lesser Sundas.	Vulnerable. CITES II. Restricted-range species: present in Sumba EBA. Poorly known	Not recommended
Common Name Scientific Name	**Range**	**Status in Wild (from <u>Handbook to the Birds of the World vol. 2& 5</u>)**	**TAG Recommendation**
Barking Owl *Ninox connivens* 4 subspecies *N.c. rufostrigata, N.c. assimilis, N.c. peninsularis, N.c. connivens*	***N.c. rufostrigata*** - N Moluccas (Morotai, Halmahera, Bacan, Obi). ***N.c. assimilia*** - C & E New Guinea W to Merauke and R Sepik, including Manam I and Karkar I. ***N.c. peninsularis*** - Coastal and subcoastal NW, N & NE Australia S to R Endeavour in Queensland, and islands in SW Torres Strait. ***N.c. connivens*** - Coastal and subcoastal SW Australia, southern gulfs, and E & SE Australia (S from foot of Cape York Peninsula).	NGT. CITES II. In SE Australia evidence of decline in population, and concern because much habitat continues to be lost and degraded by clearing and overgrazing. Listed as vulnerable in New South Wales and Victoria.	Not recommended
Southern Boobook *Ninox boobook* 10 subspecies *N.b. rotiensis, N.b. fusca, N.b. plesseni, N.b. moae, N.b. cinnamomina, N.b. remigialis, N.b. pusilla,*	***N.b. rotiensis*** - Roti. ***N.b. fusca -*** Timor. ***N.b. plesseni -*** Alor. ***N.b. moae -*** Romang, Leti and Moa. ***N.b. cinnamomina*** - Babar. ***N.b. remigialis*** - Kai Is. ***N.b. pusilla*** - S New Guinea. ***N.b. ocellata*** - Australia W of Great Dividing Range; rarely,	NGT. CITES II	Not recommended

N.b. ocellata, N.b. lurida, N.b. boobook	islands in Torres Strait; also Sawu (W of Timor). ***N.b. lurida*** - NE Queensland between Cooktown and Paluma. ***N.b. boobook*** - Coastal and subcoastal E Australia, S from S Queensland.		
Morepork *Ninox novaeseelandiae* 3 subspecies *N.n. leucopsis, N.n. undulata, N.n. novaeseelandiae*	***N.n. leucopsis*** - Tasmania and Bass Strait islands. ***N.n. undulata*** - Norfolk I. ***N.n. novaeseelandiae*** - New Zealand, including most offshore islands.	NGT. CITES II.Race *undulata* endangered on Norfolk I mainly through clearing and selective loggingRace *albaria* extinct on Lord Howe I since 1950's, this due to clearing of forest and introduced species. Race *undulata* CITES I.	Not recommended
Brown Hawk-owl *Ninox scutulata* 11 subspecies *N.s. ussuriensis, N.s. japonica, N.s. lugubris, N.s. hirsuta, N.s. obscura, N.s. burmanica, N.s. palawanensis, N.s. randi, N.s. scutulata, N.s. javanensis, N.s. boreensis*	***N.s. ussuriensis*** - SE Siberia, SE Manchuria and N Korea. ***N.s. japonica*** - E China, C & S Korea, Japan and Taiwan. ***N.s. lugubris*** - N & C India to W Assam. ***N.s. hirsuta*** - S India and Sri Lanka. ***N.s. obscura*** - Andaman and Nicobar Is. ***N.s. burmanica*** - E Assam to S China, S to N Malay Peninsula, Thailand and Indochina. ***N.s. palawanensis*** - Palawan. ***N.s. randi*** - Philippines (Luzon, Marinduque, Mindoro, Negros, Cebu, Siquijor, Mindanao, Basilan). ***N.s. scutulata*** - S Malay Peninsula, Riau Archipelago, Sumatra and Bangka. ***N.s. javanensis*** - W Java. ***N.s. borneensis*** - Borneo and N Natuna Is.	NGT. CITES II.	Not recommended
Andaman Hawk-owl *Ninox affinis*	Andaman Is (South Andaman) and Nicobar Is (Great Nicobar, Camorta, Trinkat, Car Nicobar).	NGT. CITES II. Restricted-range species: present in Andaman Islands EBA and Nicobar Islands EBA. Currently considered Near-threatened.	Not recommended
Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
White-browed Hawk-owl *Ninox superciliaris*	NE, SW & S Madagascar.	NGT. CITES II.	Not recommended
Philippine Hawk-owl *Ninox philippensis* 7 subspecies *N.p. philippensis, N.p. mindorensis, N.p. spilonota,*	***N.p. philippensis*** - Luzon, Polillo, Marinduque, Catanduanes, Samar, Leyte, Buad, and perhaps Biliran. ***N.p. mindorensis*** - Mindoro. ***N.p. spilonata*** - Sibuyan, Tablas, Cebu and Camiguin	NGT. CITES II. Race *spilonota* and *reyi,* inhabiting small islands, highly threatened by habitat destruction, with local extinctions very likely, e.g. on Cebu and Tablas.	Not recommended

N.p. proxima, N.p. centralis, N.p. spiolocephala, N.p. reyi	Sur. ***N.p. proxima*** - Masbate, Ticao. ***N.p. centralis*** - Panay, Guimaras, Negros, Bohol, Siquijor. ***N.p. spilocephala*** - Basilan, Mindanao, Dinagat, Siargao. ***N.p. rey*** - Sulu Archipelago.		
Ochre-bellied Hawk-owl *Ninox ochracea*	Sulawesi and Butung.	NGT. CITES II. Restricted-range species: present in Sulawesi EBA. Little known and status uncertain. Fairly widespread, but apparently not recorded from S Sulawesi.	Not recommended
Moluccan Hawk-owl *Ninox squamipila* 4 subspecies *N.s. hypogramma, N.s. hantu, N.s. squamipila, N.s. forbesi*	***N.s. hypogramma*** - Halmahera, Ternate and Bacan group. ***N.s. hantu*** - Buru. ***N.s. squamipila*** - Seram. ***N.s. forbesi*** - Tanimbar Is.	NGT. CITES II. Restricted-range species	Not recommended
Christmas Hawk-owl *Ninox natalis*	Christmas I (Indian Ocean).	NGT. CITES I. Widespread but confined to small, isolated Christmas I, where the only strigid; population estimated at c. 560 pairs in 1997. Listed as vulnerable in Australian national list. Probably declined by 25% since settlement and clearance of a quarter of forest during phosphate mining; much of island now protected in National Park, and mining has ceased.	Not recommended
Jungle Hawk-owl *Ninox theomacha* 4 subspecies *N.t. hoedtii, N.t. theomacha, N.t. goldii, N.t. rosseliana*	***N.t. hoedtii*** - Waigeo and Misool Is. ***N.t. theomacha*** - New Guinea. ***N.t. goldii*** - D'Entrecasteaux Archipelago (Goodenough, Fergusson, Normanby). ***N.t. rosseliana*** - Louisiade Archipelago (Tagula, Rossel).	NGT. CITES II.	Not recommended
Manus Hawk-owl *Ninox meeki*	Manus I (Admiralty Is).	NGT. CITES II. Restricted-range species: present in Admiralty Islands EBA.	Not recommended
Speckled Hawk-owl *Ninox punctulata*	Sulawesi, including Kabaena, Muna and Butung Is.	NGT. CITES II. Widespread, but generally uncommon.	Not recommended
Bismarck Hawk-owl *Ninox variegata*	New Britain, New Ireland and New Hanover, in Bismarck Archipelago.	NGT. CITES II. Restricted-range species: present in New Britain and New Ireland EBA.	Not recommended
New Britain Hawk-owl *Ninox odiosa*	New Britain, in Bismarck Archipelago.	NGT. CITES II. Restricted-range species: present in New Britain and New Ireland EBA	Not recommended
Solomon Hawk-owl *Ninox jacquinoti* 7 subspecies	***N.j. eichhorni*** - Buka, Bougainville and Choiseul. ***N.j. jacquinoti*** - Ysabel and St George.	NGT. CITES II. Restricted-range species: present in Solomon Group EBA.	Not recommended

N.j. eichhorni, N.j. jacquinoti, N.j. granti, N.j. mono, N.j. floridae, N.j. malaitae, N.j. roseoaxillaris	***N.j. granti*** - Guadalcanal. ***N.j. mono -*** Mono I. ***N.j. floridae*** - Florida I. ***N.j. malaitae*** - Malaita I. ***N.j. roseoaxillaris*** - Bauro and San Cristobal.		

Common Name **Scientific Name**	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Papuan Hawk-owl *Uroglaux dimorpha*	Irian Jaya and Papua New Guinea, including Yapen I; probably occurs throughout New Guinea, but known only from NW & SE.	NGT. CITES II. Data-deficient. Sparsely distributed throughout range, and rarely seen; appears to be rare.	Not recommended
Laughing Owl *Sceloglaux albifacies*	Formerly occurred in mainly S half of North Island in areas of lower rainfall, in South Island E of Southern Alps but well into mountains, and on Stewart I.	Almost certainly Extinct. CITES II.	Not recommended
Jamaican Owl *Pseudoscops grammicus*	Jamaica.	NGT. CITES II. Restricted-range speciesExtensive cutting of forest has probably reduced its range and numbers; advisable to monitor status while island's forest areas continue to be destroyed.	Not recommended
Striped Owl *Asio clamator* 4 subspecies *A.c. forbesi, A.c. clamator, A.c. oberi, A.c. midas*	***A.c. forbesi*** - S Mexico to Panama. ***A.c. clamator*** - Colombia and Venezuela S to E Peru and C & NE Brazil. ***A.c. oberi*** - Tobago and NE Trinidad. ***A.c. midas*** - E Bolivia and S Brazil S to N Argentina and Uruguay.	NGT. CITES II. Status generally poorly known, and little information on ecology and biology. Race *oberi* little known, may even be extinct.	Not recommended
Stygian Owl *Asio stygius* 6 subspecies *A.s. lambi, A.s. robustus, A.s. siguapa, A.s. noctipetens, A.s. stygius, A.s. barberoi*	***A.s. lambi*** - W Mexican highlands (SW Chihuahua to Jalisco). ***A.s. robustus*** - From S Mexico (Guerrero and Veracruz) discontinuously to NW Venezuela, Colombia and Ecuador. ***A.s. siguapa*** - Cuba and I of Pines. ***A.s. noctipetens*** - Hispaniola and Ile de Gonâve. ***A.s. stygius*** - From N Brazil S to E Bolivia, NE Argentina and SE Brazil. ***A.s. barberoi*** - Paraguay and N Argentina.	NGT. CITES II. Considered generally rare or patchily distributed. Distribution incompletely documented. Data on life history needed to develop conservation strategies.	Not recommended
Northern Long-eared Owl *Asio otus*	***A.o. otus*** - Eurasia, from British Is and Iberia E to Sea of Okhotsk, S to Mediterranean	NGT. CITES II.	Phase Out

4 subspecies *A.o. otus, A.o. canariensis, A.o. tuftsi, A.o. wilsonianus*	islands, Middle East, N Pakistan (has bred) and Japan, with isolated population in EC China; also Azores, and NW Africa (Morocco to NW Tunisia). ***A.o. canariensis*** - Canary Is. ***A.o. tuftsi*** - W Canada (S Yukon, S British Columbia E to Saskatchewan) S to Mexico (NW Baja California, Nuevo Leon) and S USA (W Texas). ***A.o. wilsonianus*** - From SC & SE Canada (Manitoba E to Nova Scotia) S in USA to N Oklahoma and Virginia.		
African Long-eared Owl *Asio abyssinicus* 2 subspecies *A.a. abyssinicus, A.a. graueri*	***A.a. abyssinicus*** - Highlands of Ethiopia and Eritrea. ***A.a. graueri*** - Ruwenzori and Mitumba Mts in E Zaire/W Uganda, and Mt Kenya.	NGT. CITES II. Scarce to rather rare throughout range. Race *graueri* rare on Mt Kenya; known from only 1 specimen, but sighted in 1975 and 1992.	Not recommended
Madagascar Long-eared Owl *Asio madagascariensis*	Madagascar.	NGT. CITES II. Status difficult to assess because of secretive and nocturnal lifestyle; may be overlooked. May be threatened by deforestation, which is extensive in Madagascar.	Not recommended

Common Name Scientific Name	**Range**	**Status in Wild (from Handbook to the Birds of the World vol. 2& 5)**	**TAG Recommendation**
Short-eared Owl *Asio flammeus* 10 subspecies *A.f. flammeus, A.f. ponapensis, A.f. sandwichensis, A.f. domingensis, A.f. portoricensis, A.f. pallidcaudus, A.f. bogotensis, A.f. galapagoensis, A.f. suinda, A.f. sanfordi*	***A.f. flammeus*** - Breeds Iceland, British Is, and locally through Europe and Asia E to Kamchatka and Commander Is, S to Spain, Caucasus, NE Mongolia and NE China; also North America from W & N Alaska through Canada and S to C USA. ***A.f. ponapensis*** - Pohnpei I, in E Caroline Is. ***A.f. sandwichensis*** - Hawaiian Is. ***A.f. domingensis*** - Hispaniola; also (possibly this race) Cuba. ***A.f. portoricensis*** - Puerto Rico. ***A.f. pallidicaudus*** - N Venezuela, Guyana. ***A.f. bogotensis*** - Colombia, Ecuador, NW Peru. ***A.f. galapagoensis*** - Galapagos Is. ***A.f. suinda*** - S Peru, WC Bolivia, Paraguay and SE Brazil S to Tierra del Fuego.	NGT. CITES II.	Phase Out

	A.f. sanfordi - Falkland Is.		
Marsh Owl *Asio capensis* 3 subspecies *A.c. tingitanus, A.c. capensis, A.c. hova*	***A.c. tingitanus*** - NW Morocco. ***A.c. capensis*** - Isolated areas in W Africa, from Senegal to Chad and Cameroon; also from Sudan and Ethiopian Highlands, and from S Congo, S to the Cape. ***A.c. hova*** - Madagascar.	NGT. CITES II.	Not recommended
Fearful Owl *Nesasio solomonensis*	Solomon Is, on Bougainville, Choiseul and Santa Isabel.	Vulnerable. CITES II. Restricted-range species: present in Solomon Group EBA.	Not recommended