Threatened and Near-threatened Diurnal Birds of Prey of the World

B.-U. Meyburg

One of the most important tasks of the World Working Group on Birds of Prey (WWGBP) of the International Council for Bird Preservation (ICBP) is to collect up-to-date information on the status of raptors, to identify taxa which are threatened and under threat of extinction, and to establish priorities and measures for their conservation.

For this purpose, a list, among other things, has been drawn up of endangered and threatened birds of prey throughout the world to be regularly kept up-to-date. The "Red List" was originally compiled by Leslie Brown, last revised in December 1978 (Brown et al. 1978) and is now in urgent need of re-assessment. This has been attempted by sending questionnaires to a large number of persons, by inserting articles about the project in the Newsletters of the World Working Group, by reviewing the literature and by carrying out personal studies on such endangered species like the Spanish Imperial Eagle Aquila (heliaca) adalberti (Meyburg 1975), Madagascar Sea Eagle Haliaeetus vociferoides and Madagascar Serpent Eagle astur (Meyburg & Langrand 1985). Eutriorchis have observed birds such as the Java Hawk California Condor Gymnogyps californianus, such as the Java Hawk Eagle Spizaetus Philippine Eagle Pithecophaga jefferyi and Mauritius Kestrel Falco punctatus in the wild. A special effort has been made to keep as fully informed as possible on ongoing raptor conservation projects and I have observed birds of prey for over 20 years on every continent except Australia.

The first Red Data Books (RDB) were published in 1966 and the term has since become widely used to denote registers of threatened wildlife. The first one on birds was edited by Vincent (1966), the second by King (1978-1978). Most regional Red Data Books (comprehensive list in Burton 1984) deal not only (and in some cases not even) with species or subspecies that are globally threatened with extinction, but with those that are threatened within the region concerned although perfectly safe elsewhere. This present list treats only those species that I deem to be at risk of extinction world-wide.

In late 1982 a decision was reached to exclude subspecies from the third edition of the ICBP/IUCN Bird Red Data Book (Collar & Stuart 1985). This might be interpreted as indicating that ICBP and IUCN are not concerned over the conservation of subspecies. In fact, we continue to gather information on threatened subspecies and readily act, as and when appropriate, to promote their conservation. Nevertheless we are also sensitive to the fact

EXTINCT

Species not definitely located in the wild during the past 50 years (criterion as used by CITES).

ENDANGERED

Taxa in danger of extinction and whose survival is unlikely if the causal factors continue operating.

Included are taxa whose numbers have been reduced to a critical level or whose habitats have been so drastically reduced that they are deemed to be in immediate danger of extinction. Also included are taxa that are possibly already extinct but have definitely been seen in the wild in the past 50 years.

VULNERABLE

Taxa believed likely to move into the "Endangered" category in the near future if the causal factors continue operating.

Included are taxa of which most or all the populations are decreasing because of over-exploitation, extensive destruction of habitat or other environmental disturbance; taxa with populations that have been seriously depleted and whose ultimate security has not yet been assured; and taxa with populations that are still abundant but are under threat from severe adverse factors throughout their range.

RARE

Taxa with small world populations that are not at present "Endangered" or "Vulnerable", but are at thought to be risk.

These taxa are usually localised within restricted geographical areas or habitats or are thinly scattered over a more extensive range.

INDETERMINATE

Taxa known to be "Endangered", "Vulnerable", or "Rare" but where there is not enough information to say which of the three categories is appropriate.

OUT OF DANGER

Taxa formerly included in one of the above categories, but which are now considered relatively secure because effective conservation measures have been taken or the previous threat to their survival has been removed.

INSUFFICIENTLY KNOWN

Taxa that are <u>suspected</u> but not definitely known to belong to any of the above categories (except out of Danger), because of lack of information.

N.B. In practice, "Endangered" and "Vulnerable" categories may include, temporarily, taxa whose populations are beginning to recover as a result of remedial action, but whose recovery is insufficient to justify their transfer to another category.

that resources (time, manpower, money) expended on subspecies are often resources denied to species, and for the former to be saved at the expense of the latter is largely unacceptable, in theory at least.

Necessary and correct as I believe the decision to exclude subspecies has been, I have made attempts to provide some compensation. Most importantly perhaps, the principle has been adopted that, in cases where the taxonomic arguments for specific or subspecific status are in the balance, I come down in favour of accepting the status of species, even if this is sometimes in defiance of most current opinion (e.g. Spanish Imperial Eagle, Cape Vulture, Gyps coprotheres, Réunion Harrier, Circus maurus).

The criteria used in this compilation have not been consciously relaxed or altered from those laid down by IUCN and ICBP as global definitions of threat (see Table 1). However, I have added an entirely unofficial category, "Species of special concern", following Collar and Stuart (1985). The category covers birds of particular interest in conservation and which are commonly assumed to be threatened. "Threatened" is the IUCN generic term for any species included in its specific Red Data Book categories and is thus different from the meaning of the word under U.S. conservation legislation. Decisions not only on the appropriate category of threat but also on the designation of species as threatened or not threatened have often been made only after considerable hesitation. Naturally, however, there remain very grey areas where choice becomes a matter of chance and where single small facts, so easily missed, can exert an enormous influence. Other authors would doubtless have made somewhat different decisions. Therefore, the collaboration of anyone with any information on any of the species mentioned in this text or on any other raptor judged to be threatened is warmly invited. Please send reports, reprints, comments, ideas and data to the author.

RESULTS

Of the roughly 280 species of the order are considered to be threatened. Whereas the Guadalupe Caracara Polyborus lutosus is definitely extinct (Abbott 1933) (though maybe it was conspecific with the Common Caracara Polyborus plancus), seven raptors are regarded as Endangered (see Table 2) and in danger of extinction if the causal factors continue to operate. Some are already very close to extinction (California Condor, Mauritius Kestrel) or possibly by now in fact extinct (Madagascar Serpent Eagle).

Table 2. Endangered raptors of the world

Gymnogyps californianus Haliaeetus vociferoides Eutriorchis astur Pithecophaga jefferyi Aquila (heliaca) adalberti Spizaetus bartelsi Falco punctatus

California Condor Madagascar Sea Eagle Madagascar Serpent Eagle (Extinct?) Philippine Eagle Spanish Imperial Eagle Java Hawk Eagle Mauritius Kestrel

Although the Spanish Imperial Eagle is often looked on as a race of the much more widely distributed though rare eastern form (Voous 1982) a recent taxonomic study (Hiraldo et al. 1976) has concluded that it should be

regarded as a distinct species. Both forms have probably been isolated from each other since the last ice age.

Eight species I regard as Vulnerable, which means that the species is believed likely to move into the "Endangered" category in the near future if the causal factors continue operating (see Table 3). Some of these still have populations that are abundant in certain areas (e.g. Eurasian Black Vulture Aegypius monachus in Mongolia, Meyburg & Meyburg 1983, 1984) but are under threat from severe adverse factors throughout their range. Most or all of their populations are decreasing because of extensive destruction of habitat or other environmental disturbances. Some of these species may well be already endangered (e.g.Gundlach's Hawk Accipiter gundlachi, Whitenecked Hawk Leucopternis lacernulata, Grey-backed Hawk L. occidentalis, Traylor's Forest Falcon Micrastur buckleyi) and urgently need attention.

Table 3. Vulnerable raptor species of the world

Accipiter description descript

Eurasian Black Vulture Henst's Goshawk Semi-collared Sparrowhawk Gundlach's Hawk White-necked Hawk Grey-backed Hawk Plumbeous Forest Falcon Traylor's Forest Falcon

Twenty-two species are considered Rare (see Table 4). They have small world populations that are not at present "Endangered" or "Vulnerable", but are at risk. These taxa are usually localised within restricted geographical areas or thinly scattered over a more extensive range.

Six species I consider as of Indeterminate Status (see Table 5). They are either "Rare", "Vulnerable" or "Endangered". There is, however, not enough information to say which of the three categories is appropriate. Twenty-three raptors are Insufficiently Known (see Table 6). They are suspected but because of lack of information not definitely known to belong to one of the above categories.

Three raptor species are considered "Out of danger" (see Table 7). This category does not allow for good fieldwork proving that a species is in a far better state than had previously been thought, which is essentially what has happened in the case of the Seychelles Kestrel, although its introduction to Praslin certainly counts as a valuable conservation measure taken. The Peregrine Falcon Falco peregrinus has been included in this category, not so much because of effective conservation measures taken but because the previous threat to the survival (pesticide use) of many of its populations has diminished.

Twenty taxa are listed as "Species of special concern" (see Table 8). This is not an official category of IUCN. It covers birds of particular interest in conservation and which are commonly assumed to be threatened but are in fact globally perfectly secure (e.g. Saker Falco cherrug, Bearded Vulture Gypaetus barbatus) or are very uncommon. These are "fringe" ("nearthreatened") species which at least merit monitoring (e.g. Andean Condor Vultur gryphus, Isidor's Eagle Oroaetus isidori, Southern Banded Snake

Eagle Circaetus fasciolatus) and which others may judge to merit more concern. This is also to reduce the rather artificial distinction between "Threatened" and "Secure" species.

ACTION TO BE TAKEN

Thirty raptor species appear to be in most urgent need of a survey (see Table 9). 4 of these are Endangered, 6 are at least Vulnerable, 7 at least Rare, 3 are considered Indeterminate and 10 Insufficiently Known.

These species in Table 9 have been selected when their range is known to be very small, when their habitat is under threat (especially destruction of forests), when there is very little information about them, when their fate has so far more or less been overlooked and/or when there is little likelihood of attention and support from strong national conservation organisations.

The most striking example is the Java Hawk Eagle which has never appeared in an ICBP Bird Red Data Book or any other important Red List. It inhabits rain forest and according to Brown & Amadon (1968) is known to occur only in West Java. Of about the same size as England, but with over twice the human population, Java (135,000 km²) is one of the most densely inhabited areas of the world. 400,000 ha of forest are known to have been destroyed since the last World War and very little remains. Sadly there is practically no information available on the life and habits of this fine eagle, the only observations being by Bartels (1924).

To lift some of the mystery which surrounds it, several members of the World Working Group (B.-U. Meyburg, J.-M. Thiollay, R. D. Chancellor, B. van Balen) undertook an expedition to Java in August 1986. 4500 km were covered by 4-wheel-drive car. The species was observed in three different areas: Mt. Gede - Mt. Pangrango - Mt. Salak (140 km²) and Halimun (400 km²) in West Java and Meru Betiri (500 km²) in East Java. It may also still exist in very low numbers in the mountains surrounding Bandung but was not observed there by the team. Baluran National Park proved to be too dry for the species. Ujung Kulon National Park on the other hand has been very well explored in the past but the Java Hawk Eagle has never been recorded there. The total population is estimated to be well below 50 pairs. Further studies are urgently needed.

The Philippine Eagle has been included in Table 9 since although extensively studied on Mindanao, the total number of pairs is nevertheless still unknown (Lewis 1984), whereas no serious study has ever been carried out on Luzon, where a substantial population is suspected and where the Sierra Madre mountains now represent the largest single area for the eagles (Lewis 1986).

The Madagascar Sea Eagle is currently being surveyed by a field-biologist funded by the World Working Group on Birds of Prey. So far only a single occupied nest has been found, whereas more territorial pairs have been, discovered.

Major areas of sympatry between threatened species in most urgent need of a survey naturally make excellent targets for intensified conservation activity. Geographically there are 5 countries or areas which deserve special attention. These are top priority regions for expeditions to determine the status of threatened raptors.

Table 4. Rare raptor species of the world

Henicopernis infuscata
Haliaeetus sanfordi
Haliaeetus pelagicus
Megatriorchis doriae
Erythrotriorchis radiatus
Black Honey Buzzard
Sanford's Sea Eagle
Steller's Sea Eagle
Doria's Goshawk
Red Goshawk

Accipiter buergersi Bürger's Sparrowhawk

Accipiter brachyurus New Britain Sparrowhawk

Accipiter imitator Imitator Sparrowhawk

Accipiter princeps New Britain Grey-headed Goshawk

ButeoridgwayiHispaniola HawkButeogalapagoensisGalapagos HawkButeosolitariusHawaiian Hawk

Buteo ventralis Patagonian Red-tailed Buzzard

Morphnus guianensis Crested Eagle
Harpia harpyja Harpy Eagle
Aquila (heliaca) heliaca Imperial Eagle
Aquila gurneyi Gurney's Eagle

Spizastur melanoleucus Black and White Hawk Eagle

Phalcoboenus australis Forster's Caracara

Falco hypoleucos Grey Falcon

Falco deiroleucus Orange-breasted Falcon

Falco fasciinucha Taita Falcon

Table 5. Raptor species of indeterminate status

Accipiter luteoschistaceus

Accipiter griseogularis

Leucopternis kuhli

Leucopternis polionota

Harpyopsis novaeguineae

Microhierax latifrons

Blue and Grey Sparrowhawk

Grey-throated Goshawk

White-browed Hawk

Mantled Hawk

New Guinea Eagle

Table 6. Insufficiently known raptor species

Henicopernis longicauda	Long-tailed Honey Buzzard
Pernis celebensis	Barred Honey Buzzard
Spilornis holospilus	Philippine Serpent Eagle
Spilornis rufipectus	Celebes Serpent Eagle
Spilornis klossi	Nicobar Serpent Eagle
Spilornis elgini	Andaman Serpent Eagle
Accipiter nanus	Celebes Little Sparrowhawk
Accipiter rhodogaster	Vinous-breasted Sparrowhawk
Accipiter grisieceps	Celebes Crested Goshawk
Accipiter trinotatus	Spot-tailed Goshawk
Accipiter albogularis	Pied Goshwak
Accipiter haplochrous	New Caledonian Sparrowhawk
Accipiter rufitorques	Fiji Goshawk
Accipiter poliogaster	Grey-bellied Goshawk
Harpyhaliaetus solitarius	Solitary Eagle
Buteo poecilochrous	Gurney's Buzzard
Spizaetus lanceolatus	Celebes Hawk Eagle
Spizaetus philippensis	Philippine Hawk Eagle
Spizaetus alboniger	Mountain or Blyth's Hawk Eagle
Spizaetus nanus	Wallace's Hawk Eagle

 $\underline{Spiziapteryx} \ \underline{circumcinctus}$

Polihierax insignis

Microhierax erythrogonys

Table 7. Species considered "Out of danger"

Spot-winged Falconet

Fielden's Falconet Philippine Falconet

Pandion haliaetusOspreyHaliaeetus leucocephalusBald EagleFalco peregrinusPeregrine Falcon

Madagascar has 2 endangered raptors and has therefore been selected by myself for study. Whereas we now have a better idea of the Madagascar Sea Eagle (Langrand & Meyburg 1984) there, the Madagascar Serpent Eagle remains still the most mysterious of the world's eagles, and possibly the rarest (Meyburg & Langrand 1985). If unconfirmed reports by a forester are discounted, it must in fact be considered as extinct. Madagascar is further inhabited by Henst's Goshawk Accipiter henstil which is vulnerable, very little known and rarely observed, as well as by the Banded Kestrel Falco zoniventris, another interesting endemic which must be regarded as of special concern.

Ecuador is the home of 4 vulnerable species which are very little known and may well be endangered. Traylor's Forest Falcon is a virtually unknown small raptor, recorded from only about 10 museum specimens. The Greybacked Hawk is restricted to western Ecuador, where a great decline has taken place, and adjacent north-west Peru, where it is uncommon. This hawk is now most often seen in the southern part of its range in Ecuador. It inhabits tropical and subtropical forest, the extent of which within the range of the species has been seriously reduced in recent years.

The Semi-collared Sparrowhawk Accipiter collaris is known from the Province of Pichincha (Northern Ecuador) and a few localities in northern and western Colombia, and a single specimen from the Montanas del Morro in the Andes of Merida in Venezuela. The Plumbeous Forest Falcon Micrastur plumbeus is another poorly known small raptor of the tropical forest interior, restricted to northwestern Ecuador in Esmeraldas and to south-western Colombia in Cauca and Narino departments (Collar 1986).

New Britain Island in the Bismarck Archipelago, Papua-New Guinea, is inhabited by three rare raptor species and a fourth of indeterminate status. The New Britain Grey-headed Goshawk Accipiter princeps is known only from a few adult specimens, the immature plumage being unknown (Weick 1980). The species was observed and collected on Mt. Talawe (Diamond 1971). The Blue and Grey Sparrowhawk (Accipiter luteoschistaceus) is also suspected to be rare or vulnerable.

Two raptor species (Sanford's Sea Eagle Haliaeetus sanfordi and Imitator Sparrowhawk Accipiter imitator) inhabiting the Solomon Islands (also belonging to Papua-New Guinea) are considered rare (Schodde 1979).

Finally Sulawesi (Celebes), Indonesia, is the home of 6 raptor species which are suspected of being rare, vulnerable or endangered but sufficient information is lacking.

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ZUSAMMENFASSUNG

DIE BEDROHTEN UND BEINAHE BEDROHTEN GREIFVOGELARTEN DER ERDE

Zu den wichtigsten Aufgaben der Weltarbeitsgruppe für Greifvögel und Eulen e.V. (WAG) des Internationalen Rates für Vogelschutz (IRV) gehört es, ausreichende Information über den Status der Greifvögel zusammenzutragen und vom Aussterben bedrohte und gefährdete Arten und Rassen zu identifizieren und Prioritäten für Schutzmaßnahmen festzulegen. Dabei wird seitens der WAG Aufmerksamkeit besonders auf solche Arten (und auch Habitate) gelenkt, die bisher wenig beachtet wurden oder wenig bekannt sind und für die es wenig wahrscheinlich erscheint, daß ihnen von anderer Seite Aufmerksamkeit und Hilfe zuteil werden wird.

Es wird eine "Rote Liste" der seltensten und bedrohtesten Greifvogelarten der Erde vorgelegt, wobei der Internationalen Naturschutzunion (IUCN) in der Definition der Gefährdungskategorien gefolgt wird (siehe Tab. 1) und nur in ihrem gesamten Weltbestand gefährdete Arten berücksichtigt werden.

66 Arten, das sind beinahe 25% aller <u>Falconiformes</u>, werden als gefährdet angesehen, wobei 7 Taxa nahe dem Aussterben bzw. möglicherweise bereits ausgestorben sind (siehe Tab. 2). 30 Arten (siehe Tab. 9) müssen besonders dringend untersucht werden. In 5 Ländern bzw. Gebieten kommt mehr als eine dieser Arten vor, so daß diese wichtige Zielgebiete für Expeditionen zu deren Erforschung darstellen.

Einige der in den Tabellen aufgeführten Arten sind extrem selten, über viele andere ist praktisch nichts bekannt. Einzelbeobachtungen und selbst Hinweise auf Museumsexemplare wären teilweise sehr wertvoll. Informationen darüber und Vorschläge hinsichtlich der Hinzufügung oder Streichung von Taxa sowie Angaben über den Status sehr seltener oder wenig bekannter Arten und Rassen sind stets willkommen. Sie können bei einer Revision der Liste berücksichtigt werden, die eine der wichtigsten Grundlagen für die Erstellung von Schutzprojekten darstellt.

RESUME

LES ESPECES DE RAPACES MENACEES DU MONDE

L'une des tâches les plus importantes du Groupe de Travail Mondial sur les Rapaces (GTMR) du Conseil International pour la Préservation des Oiseaux (CIPO) est de rassembler des informations suffisantes sur le statut des rapaces et d'identifier les espèces et races menacées et en danger

Table 8. Species of Special Concern

Vultur gryphus

Haliaeetus leucoryphus

Haliaeetus albicilla

Gypaetus barbatus
Gyps coprotheres

Circaetus fasciolatus

Terathopius ecaudatus

Dryotriorchis spectabilis

Circus maurus Circus maillardi

Accipiter madagascariensis

Urotriorchis macrourus

Aquila pomarina Aquila clanga

Hieraaetus dubius

Spizaetus africanus Oroaetus isidori

Falco zoniventris
Falco cherrug

Falco rusticolus

Andean Condor

Pallas's Sea Eagle

White-tailed Sea Eagle

Bearded Vulture

Cape Vulture

Southern Banded Snake Eagle

Bateleur

Congo Serpent Eagle

Black Harrier

Réunion Harrier

Madagascar Sparrowhawk

Long-tailed Hawk

Lesser Spotted Eagle

Greater Spotted Eagle

Ayres' Hawk Eagle

Cassin's Hawk Eagle

Isidor's Eagle

Banded Kestrel

Saker Falcon

Gyrfalcon

d'extinction ainsi que de déterminer des priorités pour les mesures de protection. Le GTMR porte spécialement son interêt sur les espèces (et aussi les habitats) qui ont jusqu'à présent recu peu d'attention ou qui sont peu connues et dont il est peu vraisemblable que d'autres leur accordent aide et recherche.

La "Liste Rouge" des espèces de rapaces les plus rares et menacées du monde présentée ici suit les définitions de l'Union Internationale pour la Conservation de la Nature (UICN) pour catégoriser les degrés de menace (voir Tab. 1) et ne prend en compte que les espèces menacées dans leur effectif global mondial.

66 espèces, soit presque 25% de tous les <u>Falconiformes</u>, sont considérées comme menacées, 7 taxa étant proches de <u>l'extinction</u> ou peut-être même disparues (voir Tab. 2). 30 espèces (voir Tab. 9) ont besoin d'être étudiées particulièrement rapidement. Dans 5 pays ou régions du monde se trouvent plus d'une de ces espèces, et sont donc des buts privilégiés d'expéditions de recherche.

Certaines des espèces citées dans les tableaux sont extrèmement rares, et pratiquement rien n'est connu sur de nombreuses autres. Les

Eutriorchis astur	
Spizaetus bartelsi	
Haliaeetus vociferoides	
Pithecophaga jefferyi	

ENDANGERED SPECIES Madagascar Serpent Eagle Java Hawk Eagle

Madagascar Sea Eagle Philippine Eagle

RANGE

E. Madagascar W. Java W. Madagascar

Philippines

VULNERABLE SPECIES

Micrastur buckleyi Accipiter gundlachi Leucopternis occidentalis Accipiter collaris Micrastur plumbeus Leucopternis lacernulata

Traylor's Forest Falcon Gundlach's Hawk Grey-backed Hawk Semi-collared Sparrowhawk Plumbeous Forest Falcon White-necked Hawk

E. Ecuador & NE+SC Peru Cuba W. Ecuador & NW Peru NW Colombia & N Ecuador SW Colombia & NW Ecuador E. Brazil

RARE SPECIES

Haliaeetus sanfordi Accipiter buergersi Accipiter princeps Henicopernis infuscata Accipiter brachyurus Accipiter imitator Buteo ventralis

Sanford's Sea Eagle Bürger's Sparrowhawk New Britain Grey-headed Goshawk New Britain Black Honey Buzzard New Britain Sparrowhawk Imitator Sparrowhawk Patagonian Red-tailed Buzzard

Solomon Islands E. New Guinea New Britain New Britain N Solomon Islands Patagonia

INDETERMINATE SPECIES

Microhierax latifrons Accipiter griseogularis Accipiter luteoschistaceus Bornean Falconet Grey-throated Goshawk Blue and Grey Sparrowhawk NW Borneo Moluccas New Britain

Sulawesi

Sulawesi

INSUFFICIENTLY KNOWN SPECIES

Spizaetus lanceolatus Polihierax insignis Spiziapteryx circumcinetus Accipiter nanus Accipiter rhodogaster
Accipiter griseiceps
Accipiter trinotatus
Spilornis rufipectus Spilornis elgini Spilornis klosi

Celebes Hawk Eagle Fielden's Falconet Spot-winged Falconet Celebes Little Sparrowhawk Vinous-breasted Sparrowhawk Celebes Crested Goshawk Spot-tailed Goshawk Celebes Serpent Eagle Andaman Serpent Eagle Nicobar Serpent Eagle

Sulawesi Upper Burma W & N Argentina, SW Para Sulawesi Sulawesi

Sulawesi Andaman Islands Great Nicobar Island

renseignements sur des observations, même isolées, et aussi sur les exemplaires dans les Museums, seraient parfois très précieux. Le GTMR souhaite obtenir des informations et des conseils concernant les taxa à ajouter ou à supprimer ainsi que des données sur le statut des espèces et races très rares ou peu connues. Celles-ci pourront être prises en compte lors de la révision de la liste qui constitue l'une des bases de décision pour l'élaboration de projets de protection.

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