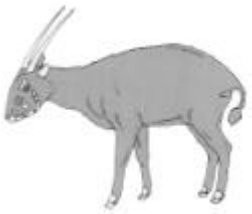
CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Seventeenth meeting of the Animals Committee
Hanoi (Viet Nam), 30 July-3 August 2001

Periodic review of animal taxa in the Appendices [Resolution Conf. 9.1 (Rev.)]

EVALUATION OF SPECIES SELECTED AT AC15 AND AC16

This document has been prepared by the CITES Secretariat.

1. Reviews of some species that were selected at the 16th meeting of the Animals Committee (which include several species selected at the 15th meeting of the Animals Committee) and an update of a review submitted to the 16th meeting of the Animals Committee are presented as annexes to this document.

2. Reviews are provided (as submitted) in the annexes for the species listed below. Annexes 1a to 1f are in Spanish only and Annex 2a is in English only.

   AVES

   Ara macao (reviewed by Mexico) — Annex 1 (page 3)

   Falco peregrinus (reviewed by the United States of America) — Annex 2 (page 35)

   REPTILIA

   Cnemidophorus hyperythrus (reviewed by the United States of America) — Annex 3 (page 63)

Scarlet Macaw (*Ara macao*)

Prepared by:
The United Mexican States

CITES Scientific Authority: Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO)

Mexico, May 2001

Taxon: *Ara macao* (Linnaeus, 1758 – *Psitaccus macao*)
Kingdom: Fauna
Phylum: Chordata
Class: Aves
Order: Psittaciformes
Family: Psittacidae

Common names:
Spanish: Guacamaya roja, guacamaya bandera, papagayo escarlata, lapa roja.
English: Scarlet Macaw
French: Ara macao, Ara rouge
Portuguese: Papagaio, Macacos, Arara macau, Arara Vermelha
Danish: Lysrød ara
Dutch: Geelvleugelara
Finnish: Punaara
German: Hellroter Ara
Italian: Ara rossa e gialla

INTRODUCTION:

In the course of the fifteenth meeting of the CITES Animals Committee, held in Antananarivo, Madagascar from 5 to 9 July 1999, it was agreed that some of the species listed in the CITES Appendices should be reviewed to determine their biological and conservation status. The intention was to determine whether the current listing of the species in any of the CITES Appendices adequately reflected its conservation status in the wild and the implication that this had for trade. As part of this undertaking, the scarlet macaw (*Ara macao*) was selected.

At the last (sixteenth) meeting of the Animals Committee, held in West Virginia, USA between 11 and 15 December 2000, the reports on the reviews of those species were presented. However, not all of the reports were presented, and one of those not presented was the one on the scarlet macaw (*Ara macao*). The Parties present called once again for countries to volunteer to cover some of the species on which a report had not been given, and Mexico decided to undertake the review of some of those taxa, including the scarlet macaw (*Ara macao*), since this is a species which breeds in Mexico.

The scarlet macaw was first listed in Appendix I of CITES ON 1 August 1985. The present report evaluates the current status of the species with respect to the criteria for amending the Appendices (Conf. 9.24, Annex 1). It is based on a review of the literature, on consultations with specialists on the species and on a seminar held among conservation institutions from Belize, Guatemala and Mexico during February 2001.

REVIEW OF THE LITERATURE:

General Biology

The scarlet macaw (*Ara macao*) is one of the 16 species of macaw currently in existence and distributed over the tropical rain-forest region of the Americas, the neotropical region. The third largest of these species, it is generally observed in pairs or flying in family groups. It is a species comprising two subspecies which have only recently been recognized. In general, little is known of its biology.

This species is found exclusively in forests at water's edges, where the forest is evergreen at high levels and semi-deciduous at medium levels. It is found from sea level up to 600 m above sea level. Its reproduction is slow, and the breeding season varies with the latitude. In the northern part of Central America (Guatemala and Belize) and in Mexico it breeds between January and July. In other parts of Central America (Costa Rica and Panama) it breeds from December to June and in South America (Venezuela, Peru and Brazil) the breeding period may extend from November to June. The species lays one or two eggs, inside cavities made in living or dead trees by other birds or occasionally by themselves. The chicks hatch on average after 28 days of incubation and remain in the nest until the age of 120 to 137 days. Thus they spend between three and four months in the nest. The parents feed them four to six times a day.

The young birds fly out of the nest together with the parents at between 97 and 140 days of age. They remain with the parents for up to almost one year, until the pair begins to nest again, although it has been recorded that on some occasions the pair will not nest again until the second year. It is estimated that the young birds do not reach sexual maturity until almost three or four years of age. The diet of this macaw consists of fruit, seeds, pods, leaf shoots, flowers and occasionally insects. It is known that it feeds on approximately 25 families, and 126 species, of plants.

We have recently begun to know more about its requirements as to range and habitat and about its seasonal movements (Forshaw 1977, Roth 1984, Munn 1988, Vaughan *et al*. 1991, Marineros 1993, Abramson *et al* 1995, Marineros and Vaughan 1995, Iñigo-Elias 1996, Pérez-Pérez 1998, Carreón and Iñigo-Elias 1999, Renton 2000).

Originally, the scarlet macaw was listed in Appendix III in 1976. It was then listed in Appendix II in 1981 and transferred to Appendix I in 1985 (UNEP-WCMC 2001). This trend of increasing its protection under CITES was due to the increase, between 1960 and 1985, in the illegal trade in specimens captured in the wild and sold in particular on domestic markets (see Annexes 1b and 1c), to habitat loss and to fragmentation of populations (Collar and Juniper 1992). Owing to continued exploitation, exceeding the carrying capacity (K), the wild populations of parrots and of this species of macaw in particular have not been able to recover and have continued to decline; in some countries they are on the point of extinction and in others they have become locally extinct (Thurber, *et al* 1987, Iñigo-Elias and Ramos 1991, Beissinguer and Bucher 1992, Iñigo-Elias 1996).

On a global scale, the scarlet macaw has never been considered by IUCN to be a species within any of the categories of threat (Collar *et al* 1992, Collar *et al* 1994, Hilton-Taylor 2000, BLI 2000). However, recently IUCN published "Parrots: Status Survey and Conservation Action Plan", in which it is noted that the conservation status of the species should be carefully reviewed, in particular the population of *Ara macao cyanoptera* between Mexico and the northern part of Costa Rica, since this has declined drastically in the past 20 years (Snyder *et al*. 2000). The authors of this plan suggest that at least the population of

the north of Central America and Mexico should be included by IUCN as an "ENDANGERED (A1a, b, d)" taxon.

Subspecies and Distribution

The scarlet macaw (*Ara macao*) was considered for a long time to have no subspecies (Forshaw 1977), although recently two have been described: *Ara macao cyanoptera* which is the more northern population of Central America, from Mexico to the middle of Nicaragua, and which comprises specimens of a larger size; and the second population *Ara macao macao*, which is distributed over the south of Nicaragua, the rest of Central America and South America (Wiedenfeld 1994, Valentine 1995).

Range and Population Estimates

Background

Although the scarlet macaw is widely distributed over various countries of the tropical part of the Americas: Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago and Venezuela, this species has always had an isolated and restricted area of distribution, limited to forests at water's edges (Freidman *et al*. 1950, Slud 1964, Snyder 1966, Monroe 1968, Forshaw 1977, Meyer de Schauensee and Phelps 1978, Ridgely 1981, Parker *et al* 1982, Hilty and Brown 1986, Remsen and Traylor 1989, Ridgely and Gwynne 1989, Stiles *et al* 1989, Ffrench 1991, Martinez-Sanchez 1991, Tostain *et al*. 1992, Sick 1993, Haverschmidt and Mees 1994, Howell and Webb 1995, Iñigo-Elias 1996).

Present

Belize: There is a very small population of not more than 200 specimens located in the south-west of the country in the valleys of the Maya Centrales mountains, in the area known as Upper Macal and Raspaculo River, Chiquibul and Red Bank in the Mountain Pine Ridge Forest Reserves (Kainer 1991, Manzanero 1991, Matola, S. personal communication, Renton 2000, Carreon *et al*. 2001).

Bolivia: Not reviewed.

Brazil: It occurs in large numbers throughout the Amazon region (Roth 1984, Sick 1993); however we did not discover any information on recent estimates of population or distribution.

Colombia: It is found in the regions of the country known as Orinoquia and Amazónica (MMARCO 2001c). There are no population estimates, but it is believed to be common.

Costa Rica: There is a population towards the Pacific coastal plain, located in the Osa peninsula in the Corcovado National Park (approximately 50-100 individuals), Carara Biosphere Reserve (approximately 219 individuals) and in the Province of Guanacaste in the Palo Verde National Wildlife Reserve (approximately 6 to 8 individuals) (Vaughan *et al*. 1991, Marineros and Vaughan 1995, Renton 2000).

Ecuador: We found information only for the Amazon region, towards the Yuturi lagoon along the Napo river.

El Salvador: The species became extinct in this country between the seventies and the eighties. It was already considered rare between 1968 and 1970 (Thurber *et al* 1987).

French Guiana: No information found.

Guatemala: There is a population which is restricted to the Laguna del Tigre National Park, Sierra del Lacandón, La Danta Biological Corridor and western forestry areas within the Mayan Biosphere Reserve. (M.C. Paiz personal communication, Pérez-Pérez 1998, Renton 2000, Carreón *et al*. 2001). It is estimated that between 100 and 200 specimens still exist in the whole of Guatemala.

Guyana: No information found.

Honduras: There are no recent population estimates. At the present time, only a small and isolated population remains in the north-west of Honduras, in the provinces of Olancho and Gracias a Dios; along the brooks of the Rió Plátano Biosphere Reserve. Occasionally it moves into the El Paraíso district (Thorn 1991, Renton 2000).

Mexico: The wild populations of the states of Tabasco, Veracruz, Campeche, San Luis Potosí and Tamaulipas are already extinct. There remain only two small and isolated populations; one in the state of Oaxaca (approximately 50 individuals) in the region of the upper Uxpanapa river and the other in the state of Chiapas in the basin of the Usumacinta river (approximately 400 individuals) in the region known as Selva Lacandona (Binford 1989, Iñigo-Elias 1996, Macias *et al*. 2000, Marco Lazcano personal comm. and Javier Castañeda personal comm.).

Nicaragua: The population is very small and isolated, not exceeding a hundred specimens. It is found towards the Atlantic ridge in the Cosiguina region, in the Bosawas Reserve and more towards the south in the Prinzapolka and Río Grande de Matagalpa rivers (Martínez-Sánchez 1991, Renton 2000).

Panama: This species is very rare, being currently limited to two small populations, one on the island of Coiba and the other in the Azuero peninsula in the south-west of the Los Santos region. It survives on the island of Coiba because this is a high-security prison, heavily guarded and with few visitors (ANCONA 2001). There are no recent population estimates.

Peru: It is an uncommon species in the south-east of the country towards the Amazon region east of the Andes range in the basin of the Manu and Tambopata rivers, above the Manu National Park, Tambopata-Candamo Reserve Zone (Munn 1988, Munn *et al* 1991).

Suriname: No recent information was discovered.

Trinidad and Tobago: No information was discovered.

Venezuela: It is common locally, having a very isolated habitat. It occurs in the states of Bolívar and Monagas, in the Caura forest reserve and on land alongside the Caura river (Desenne and Strahl 1991, Morales et al 1994, Iñigo-Elias pers. comm.)

Size of the Population and World Trend

Wiedenfeld 1994 is the only reference which speculates as to a population estimate for the subspecies *Ara macao cyanoptera*. He suggests that it could be estimated that there currently exists a very small residual population of between 3,000 and 4,000 specimens, distributed over Mexico, Guatemala, Belize, Honduras, Nicaragua and Costa Rica. However, he does not present survey data to back up this hypothetical number, which means that this estimate has to be treated with care, since the numbers could be much lower than estimated by this author.

Threats

Belize: The destruction of the only nesting site of the scarlet macaw in the country was brought about by the "Macal River-Chalillo" hydroelectric development project; an additional occasional threat is capture for illegal trade and subsistence hunting, in addition to the fragmentation and isolation of wild populations.

Costa Rica: Illegal capture of specimens, destruction of nests, deforestation and fragmentation of populations and habitat.

Guatemala: Destruction of nesting sites, capture for the illegal trade both on domestic and on international markets, fragmentation of populations and competition for nesting sites, with the scarlet macaws being displaced by from their nesting cavities by Africanized honey bees.

Honduras: Illegal capture of specimens, destruction and fragmentation of habitat.

Mexico: Legal and illegal capture of wildlife specimens, fragmentation of populations and habitat. In the report on trade in parrots across the Texas-Mexico border (in the states of Nuevo León and Tamaulipas), it is noted that between 1990 and 1993 four scarlet macaws were confiscated. At the police station of Profepa, alone, in the State of Nuevo León, between 1997 and 2000 more than ten specimens of *Ara macao* were confiscated.

Nicaragua: Trade in the last specimens in the country, fragmentation of habitat and wild populations.

Panama: There are various threats facing the species in this country, in particular direct hunting to pluck the feathers, the international and domestic trade in pets and destruction of habitat. Locally, scarlet macaws (*Ara macao*) are hunted intensively, in order mainly to pluck the feathers which are used in making local clothes and masks for traditional costumes and dances known as the Diablos Sucios.

Legislation

Belize: The species is protected by national law. Possession of and trade in the species are forbidden; Environmental Protection Act 1992.

Brazil: Domestic or export trade in, or possession of, specimens of scarlet macaw or of any other Brazilian wild bird is forbidden, with the exception of specimens from hatcheries or zoos authorized by the "Brazilian Institute for the Environment and Renewable Natural Resources" (IBAMA).

Colombia: The species is listed with the classification "unknown" on the "List of Colombian Species Close to Extinction" of the Ministry of the Environment of the Republic of Colombia (MMARCO 2001a). But it is not noted as being in danger of extinction in the list of species of birds in danger of extinction in Colombia (Renjifo 1997). However, two other macaws, *Ara militaris* and *Ara ambigua*, are noted as being vulnerable. Nor does the Ministry of the Environment of the Republic of Colombia list *Ara macao* as a CITES Appendix I species (see webpage: http://www.minambiente.gov.co/biogeo/menu/biodiversidad/species/cites.html).

Nevertheless, it is protected by legislation: Decree 1608 of 1978, Amending Decree 2811 / 74 concerning wild fauna; Law 17 of 1981, Approval of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); Law 84 of 1989, National Statute on the Protection of Animals; Decree 2811 of 18 December 1974.

Guatemala: The species is listed on the Red List of Wild Fauna in Guatemala (Resolution No. 27-96), CITES (Appendix I), Law on Protected Areas, Decree 4-89, and its implementing regulations. However, there is a need to re-evaluate the laws and regulations with respect to the illegal taking of wild fauna.

Mexico: It is listed in the Mexican Official Regulation NOM 059-ECOL-1994 as a species in danger of extinction (Macias *et al* 2000).

Venezuela: The scarlet macaw is considered in Venezuela to be a species within the category of "vulnerable" (Rodríguez and Rojas 1995). It is also protected by the Law on Protection of Wild Fauna.

Trade

Reviewing the trade in live specimens of this species on the global scale (see Annex 1b), we may observe that between 1975 and 1990 a total of 1,501 scarlet macaws were exported, and the importing countries reported a total trade of 3,849 individuals, according to WCMC data. The country importing the greatest quantity was the United States. However, with regard to the exporting countries we see a major change: during the years 1981 to 1987 we may note that the major exports came from countries in which the scarlet macaw breeds or bred in the wild, as is the case for Bolivia, Guyana and Suriname, from which it can be inferred that most if not all of the specimens leaving those countries were wild. Starting in 1987, there is a considerable drop in exports and imports, and at that point the countries with breeders who had been successful in ensuring a stock of birds for breeding in captivity became able to sell these specimens of scarlet macaw. Some of those countries are the United States of America, the Philippines and Canada, in which the species does not occur naturally. It is important to add that during the period 1981 to 1991 the countries in which this species does occur in the wild constantly opened and closed their borders to the export of macaws and other birds (Mulliken and Thomsen 1995). In Annex 1c it can also be seen that during the period 1968 to 1972 a total of 1,198 scarlet macaws (*Ara macao*) were imported into the USA alone, according to data of the USFWS. It is also recorded that during this same period various Central American countries exported specimens of this species to the USA.

Belize: Currently neither international nor domestic trade in this species is permitted.

Colombia: At the present time trade in the scarlet macaw (*Ara macao*) taken from the wild is forbidden and there are no hatcheries of macaws in captivity for commercial purposes. However, there are 82 zoological breeding facilities which are legally registered and 33 companies involved in processing and selling the products obtained from other vertebrates. The illegal trade in wild fauna is a serious problem in Colombia, despite the strict legislation and the measures adopted so far to guarantee its protection and to encourage the sustainable use of wild fauna. The trade in the wild birdlife of the Amazon region of Colombia is destined for the neighbouring Amazonian countries or the cities of Pasto, Popayán, Cali, Florencia, Neiva, Ibagué, Villavicencio and Bogotá, where it is distributed within the country or exported to the United States and European countries. On the regional level, the principal centres of demand and transit of wild fauna are Puerto Leguízamo, La Tagua, Orito, Guamués, San Miguel, Puerto Asís y Mocoa, Mitú, San José del Guaviare and Puerto Inírida. In Colombia 16% of the volume and makeup of the illegal trade in wild fauna relates to birds, with a total of 122 species being involved, including the scarlet macaw (MMARCO 2001b).

Mexico: Illegal trade persists in this species both within and outside the country. Mexico does not permit trade in living specimens of wildlife. However, with the new legislation relating to wildlife, the General Law on Wildlife and Wildlife Management Units (UMAs) it is now

possible to carry on trade in Mexico in a species in danger of extinction, always provided that it comes from a hatchery or UMA registered with the CITES Management Authority of the country.

Suriname: During the period 1997-2001 the CITES Secretariat authorized a total quota of 507 wild specimens to be captured and sold (see Table 3).

Venezuela: The species is intensively exploited in the illegal trade in parrots (Desenne and Strahl 1991).

Conclusion

This review of the taxon *Ara macao* demonstrates that at the present time the population is rare or uncommon n the majority of the countries in which it ranges naturally, thereby supporting the idea that this species should remain in Appendix I. The information available on worldwide trade, as well as on the illegal trade within the countries of origin, displays a trend in exploitation which exceeds the carrying capacity (K) of the wild population of macaws in a region or country. This could cause the species to be exhausted or to become locally extinct, as is already happening in the greater part of Central America and Mexico. The data on worldwide trade also indicate that there is now trade in individuals bred in captivity, since bird-breeders and pet-owners prefer animals which are healthy, more docile and easier to domesticate than specimens captured in the wild. The majority of the countries in which the scarlet macaw occurs naturally are protecting the species with the environmental legislation in force in their territory.

The species continues to be severely vulnerable owing to the illegal trade which continues in the countries in which the species occurs naturally; the fact that its habitat, forests at water's edges, has disappeared virtually completely; and the fact that the numbers of individuals are so low that many of the wild populations will have difficulty in recovering, as has already occurred in El Salvador, where the species died out between 1970 and 1987.

In Central America the situation is critical and it is recommended that CITES should not only retain the scarlet macaw in Appendix I but should also provide greater protection to the species, which without that is being utilized today in great numbers as it was in the recent past. In consequence, CITES thus needs to ensure that trade does not remain a threat to the conservation of the species. It is also recommended that IUCN should revise the categorization of this species in the Appendices of endangered species which it administers. Specialists from Belize, Guatemala and Mexico recommend that it should be listed in one of the categories of Endangerment (E).

Based on the reports from three countries, Belize, Guatemala and Mexico (Annexes 1d, 1e, 1f), review of the scientific literature, information from Governments and comments from experts, our recommendation is that it is preferable, at the present time and for a period of 10 years, to retain this species in Appendix I owing to the continuing illegal trade, the rarity of some populations in the range states, the lack of programmes of periodic evaluation of the populations in the majority of the countries, and the lack of monitoring and difficulties in adequately enforcing the law.

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Total de especimenes de guacamaya roja (*Ara macao*) comerciados, importados o exportados a nivel mundial, y el país que más ejemplares exportó y el que más importó durante el periodo de 1975 a 1990, como están reportadas en las bases de datos de WCMC.

Año	Apéndice	Ejemplares Comerciados		País con mayor comercio y % del total comercializado	
		Exportados	Importados	Exportado %	Importado %
1975		Sin registro	Sin registro		
1976	III	Sin registro	Sin registro		
1977	III	Sin registro	Sin registro		
1978	III	Sin registro	Sin registro		
1979	III	Sin registro	Sin registro		
1980	II	Sin registro	Sin registro		
1981	II	693	151	Bolivia 92%	USA 83%
1982	II	57	1,201	Bolivia 57%	USA 95%
1983	II	235	1,150	Bolivia 84%	USA 93%
1984	I y II	129	594	Guyana 41%	USA 77%
1985	I y II	187	515	Guyana 75%	USA 38%
1986	I	79	84	Surinam 56%	USA 61%
1987	I	42	65	Guyana 31%	USA 62%
1988	I	27	35	USA 19%	USA 19%
1989	I	26	40	Filipinas 19%	USA 28%
1990	I	26	14	Canadá 31%	USA 57%
		1501	3,849		

Fuente: UNEP-WCMC. Base de datos sobre ejemplares comerciados entre 1975 y 1990 solicitados a WCMC en 1995.

Ejemplares de guacamaya roja (*Ara macao*) exportados por algunos países hacia EUA durante 1968 y 1972, como están reportados en los datos de USFWS.

País Exportador/Año	1968	1969	1970	1971	1972	Total
Colombia			50	748	169	967
Costa Rica				1		1
Guatemala			13	65	1	79
Holanda				1		1
Honduras			2			2
Nicaragua				17	10	27
Panamá			5			5
Perú				1		1
Sin conocer	28	87				115
Total	28	87	5	833	180	1198

Fuente: Banks 1970, Banks and Clapp1972, Clapp and Banks 1973a, 1973b; y Clapp 1975.

Cuotas de ejemplares de guacamaya roja (*Ara macao*) autorizadas por CITES para exportación, provenientes de especimenes capturados en estado silvestre durante 1997-2001.

Año	País de Origen	Cuota
2001	Surinam	100
2000	Surinam	100
1999	Surinam	100
1998	Surinam	100
1997	Surinam	133
Total		533

Fuente: UNEP-WCMC 2001.

Comentarios sobre el examen periódico del taxa *Ara macao* incluidos en el Apéndice I por especialistas de Belice.

Parte I: Criterios para la inclusión de especies en el Apéndice I

Criterios	A La población silvestre es pequeña y presenta al menos una de las características siguientes (i-v):					B La población silvestre tiene un área de distribución restringida y presenta al menos una de las características siguientes (i-iv):				C Una disminución del número de ejemplares en la naturaleza, que se haya bien sea (i-ii):		D Si no se incluye en el Apéndice I, es probable que cumpla A, B o C en un periodo de 5 años	Criterio comercial Al menos una de las características siguientes (i-iv):				Apéndice I (Y/N)	Problemas de aplicación
Taxón	*i*	*ii*	*iii*	*iv*	*v*	*i*	*ii*	*iii*	*iv*	*i*	*ii*		*i*	*ii*	*iii*	*iv*		
Ara macao cyanoptera	Y	Y	Y	*N3*	N3	Y	*Y*	Y	Y	Y	Y	Y					Y	*VER NOTAS 1 Y 2 ABAJO.*

NOTAS: 1 = En el momento de contestar el cuestionario no se contó con los criterios comerciales omitidos en la Tabla 1 del Doc. AC. 16.8–p.10 y 11; los cuales serian buscados posteriormente con el Secretariado CITES para responder esta parte faltante.

Parte II: UICN Criterios de Amenaza: El criterio sobre la categoría de amenaza de *Ara macao cyanoptera* en Belice fue revisado según los últimos criterios de UICN disponibles hasta el 9 de febrero de 2001, los cuales fueron aprobados durante la 40 reunión del Consejo de UICN el 30 de Noviembre de 1994.

Para Belice *Ara macao cyanoptera* tendría que ser clasificada por los criterios UICN como: E (A_{1a}, A_{1c}, A_{1d}, A_2, B_1, B_{2a}, B_{2b}, B_{2c}, B_{2e}, B_{3a}, B_3b, B_{3c}, C_1, C_{2a}, D, E), donde la reducción de la población es observada, la pérdida de hábitat es notoria y la población reproductiva es menor a 250 individuos.

Parte III Cuestionario:

a) Nombre de la Parte a la que se enviará el cuestionario: Belice

b) Nombre del responsable del examen en el país en cuestión (véase la Notificación a las Partes No. 1999/56), incluso la dirección a la que deben remitirse los cuestionarios rellenados;

Sharon Matola	Belize Zoo	(501) 81 3004/81 3010	belizezoo@btl.net	The Belize Zoo, Mile 29 Western Hwy, .O. Box 1787, Belize City, Belize, Central America
Greg Sho	Belize Zoo	(501) 81 3004	belizezoo@btl.net	The Belize Zoo, Mile 29 Western Hwy, .O. Box 1787, Belize City, Belize, Central America

c) Información que debe proporcionar el responsable del examen:

- Nombre del taxón (incluida toda la información taxonómica a que se hace alusión en el Anexo a la Resolución Conf. 9.24):

Ara macao cyanoptera

- Área de distribución: Belice
- Resumen de los datos comerciales:
- Toda la información disponible de otras fuentes:

d) Información que debe solicitarse a la Parte respecto de:

- A fines de comunicación: el nombre y la dirección de la persona que proporcione información sobre las especies de que se trate.

Ver tabla arriba

- Situación actual de la población: Declinando, amenazado el único hábitat donde se reproduce esta especie en el país por la posible construcción de una represa hidroeléctrica conocida como Chalillo Dam y fragmentación de habitats dentro de reservas
- Información sobre las tendencias de la población: Declinando
- Correcciones /adiciones a la información proporcionada por el país concernido:
- Preferencias en materia de hábitat: Selvas altas y medianas pegadas a los ríos
- Información sobre la legislación (si es posible) que ampara la especie a escala nacional:
- Información sobre la legislación (si es posible) que ampara la especie a escala internacional: Belice es signatario de CITEs donde la especie esta en Apéndice I.
- Información sobre el comercio nacional: Trafico y cacería ilegal particularmente esto en Red Bank, Belice
- Medidas de gestión existentes: Guacamayas Sin Fronteras Trinacional con Guatemala y México; Campaña internacional del Natural Defense Resource Council (NRDC) contra la construcción de la presa de Chalillo y la destrucción del unico hábitat donde se reproduce esta especie
- Cría en cautividad conocida: No en Belice
- Publicaciones o referencias en las que se basa la información:

Comentarios sobre el examen periódico del taxa *Ara macao* incluidos en el Apéndice I por especialistas de Guatemala.

Parte I: Criterios para la inclusión de especies en el Apéndice I

Criterios	A La población silvestre es pequeña y presenta al menos una de las características siguientes (i-v):					B La población silvestre tiene un área de distribución restringida y presenta al menos una de las características siguientes (i-iv):				C Una disminución del número de ejemplares en la naturaleza, que se haya bien sea (i-ii):		D Si no se incluye en el Apéndice I, es probable que cumpla A, B o C en un periodo de 5 años	Criterio comercial Al menos una de las características siguientes (i-iv):				Apéndice I (Y/N)	Problemasde aplicación
Taxón	*i*	*ii*	*iii*	*iv*	*v*	*i*	*ii*	*iii*	*iv*	*i*	*ii*		*i*	*ii*	*iii*	*iv*		
Ara macao cyanoptera	Y	Y	N2	*N2*	Y	Y	*N2*	Y	Y	Y	Y	Y					Y	*VER NOTAS 1 Y 2 ABAJO.*

NOTAS: 1 = En el criterio Aiv no se define cual es el corto plazo. En este caso [el grupo de Guatemala] se tomó a 5 años.

2 = En el momento de contestar el cuestionario no se contó con los criterios comerciales omitidos en la Tabla 1 del Doc. AC. 16.8– p.10 y 11; los cuales serian buscados posteriormente con el Secretariado CITES para responder esta parte faltante.

Parte II: UICN Criterios de Amenaza: El criterio sobre la categoría de amenaza de *Ara macao cyanoptera* en Guatemala fue revisado según los últimos criterios de UICN disponibles hasta el 9 de febrero de 2001 los cuales fueron aprobados durante la 40 reunión del Consejo de UICN el 30 de Noviembre de 1994.

Para Guatemala *Ara macao cyanoptera* tendría que ser clasificada por los criterios UICN como: E (A_{1a}, A_{1c}, B_{2a}, B_{2b}), donde la reducción de la población es observada, perdida de hábitat es notoria y hay que actualizar, población reproductiva menor a 25 individuos.

Parte III: Cuestionario

a) Nombre de la Parte a la que se enviará el cuestionario; Biólogos de Guatemala integrados en la iniciativa Guacamayas sin Fronteras.

b) Nombre del responsable del examen en el país en cuestión (véase la Notificación a las Partes No. 1999/56), incluso la dirección a la que deben remitirse los cuestionarios rellenados;

Marie Claire Paiz	Defensores de la Naturaleza	(502) 926 3095	mcpaiz@defensores.org.gt	19 Avenida 0-89, Zona 15 Vista Hermosa 2, Cd. de Guatemala, Guat. Centro América
Omar Molina	Defensores de la Naturaleza	(502) 926 3095	lacandon@defensores.org.gt	19 Avenida 0-89, Zona 15 Vista Hermosa 2, Cd. de Guatemala, Guat. Centro América
Rodrigo Morales	Defensores de la Naturaleza	(502) 926 3095	rmr@intelnet.net.gt	19 Avenida 0-89, Zona 15 Vista Hermosa 2, Cd. de Guatemala, Guat. Centro América
Francisco Castañeda	PROPETEN-CI	(502) 599 3664	fjcmoya@hotmail.com	18 calle 32-02, Zona Villa Linda II, Ciudad de Guatemala, Guat.
Miriam Castillo	PROPETEN-CI	(502) 926 13 70	mcastillo@conservation.org.gt	18 calle 32-02, Zona Villa Linda II, Ciudad de Guatemala, Guat.
Zucely Orellana	PROPETEN-CI	(502) 926 13 70	zorellana@conservation.org.gt	18 calle 32-02, Zona Villa Linda II, Ciudad de Guatemala, Guat.
Rony Rodas	CANAN K' AAX	(502) 926 3732	ronyrodasc@hotmail.com	Asociación Guatemalteca para la Conservación Natural Canan K'aax, Frente al Salón Itzá, San Benito, Petén Guatemala

Werner Paz	CANAN K' AAX	(502) 926 3732	wernerpaz@hotmail.com	Asociación Guatemalteca para la Conservación Natural Canan K'aax, Frente al Salón Itzá, San Benito, Petén Guatemala
Miguel Angel Pereira	CANAN K' AAX	(502) 926 3732		Asociación Guatemalteca para la Conservación Natural Canan K'aax, Frente al Salón Itzá, San Benito, Petén Guatemala
Marco Benitez	ARCAS	(502) 926 09 46	arcaspeten@intelnet.net.gt	21 Calle 9-44A, Zona 11, mariscal, Guatemala, Guat.
Fernando Martinez Galicia	ARCAS	(502) 926 09 46	arcaspeten@intelnet.net.gt	21 Calle 9-44A, Zona 11, mariscal, Guatemala, Guat.
Eva Carola Vallejo Rivera	IDEADS	(502) 253 1987 2208 785	ideads@intelnet.net.gt	3a. Avenida 4-68, Zona 1, Segundo Nivel, C.P. 01001, Cd. Guatemala, Guat. Centro América
Robin Bjork	Wildlife Conservation Society (WCS)	(502) 926 0569	wcspeten@secmas.gua.net rdbjork@hotmail.com	WCS Debajo de SAT, Ciudad de Flores, Petén Guatemala
Julio Alfredo Madrid	CONAP - Peten	(502) 926 1012	cemecc@gold.guate.net	Antiguo Hospital San Benito, Peten
Roberto Ruíz Fumagalli	Jefe de la Sección de Fauna Silvestre CONAP-Guatemala	(502) 230 00 71 y 253 4141	rruizf@yahoo.com	Consejo Nacional de areas Protegidas 5 Av. 6-06 Zona 1. Edif. IPM, 6to. Nivel, Guatemala, Guat.

c) Información que debe proporcionar el responsable del examen: Nombre del taxón (incluida toda la información taxonómica a que se hace alusión en el Anexo a la Resolución Conf. 9.24): *Ara macao cyanoptera*

- Área de distribución: Guatemala

- Resumen de los datos comerciales: No disponibles
- Toda la información disponible de otras fuentes:

d) Información que debe solicitarse a la Parte respecto de:

- A fines de comunicación: el nombre y la dirección de la persona que proporcione información sobre las especies de que se trate: Ver Tabla Arriba
- Situación actual de la población: Amenazada, persecución y fragmentación de hábitat
- Información sobre las tendencias de la población: Declinación
- Correcciones /adiciones a la información proporcionada por el país concernido: Ninguna
- Preferencias en materia de hábitat: Selvas altas perennifolias y medianas subcaducifolias riparias
- Información sobre la legislación (si es posible) que ampara la especie a escala nacional: Lista Roja de Fauna Silvestre para Guatemala (Resolución No. 27-96); y Ley de Áreas Protegidas, decreto 4-89, y su reglamento. Sin embargo, es necesario reevaluar las leyes y reglamentos con respecto a la extracción ilegal de fauna silvestre
- Información sobre la legislación (si es posible) que ampara la especie a escala internacional: CITES (Apéndice I): especie con alto riesgo de extinción;
- Información sobre el comercio nacional: Trafico ilegal difícil de documentar
- Medidas de gestión existentes: Iniciativa Guacamayas sin Fronteras–Guatemala y Trinacional con Belice y México
- Cría en cautividad conocida: Si
- Publicaciones o referencias en las que se basa la información: (1) Guacamayas Sin Fronteras Reporte Final (en Preparación)-USAID y CI; (2) E. Selvin Perez Perez 1998. Tesis de Licenciatura, Universidad de San Carlos de Guatemala, Guat. Evaluación del habitat disponible para la guacamaya roja (*Ara macao*) en Peten, Guatemala.

Comentarios sobre el examen periódico del taxa *Ara macao* incluidos en el Apéndice I por especialistas de México.

Parte I: Criterios para la inclusión de especies en el Apéndice I

Criterios	A La población silvestre es pequeña y presenta al menos una de las características siguientes (i-v):					B La población silvestre tiene un área de distribución restringida y presenta al menos una de las características siguientes (i-iv):				C Una disminución del número de ejemplares en la naturaleza, que se haya bien sea (i-ii):		D Si no se incluye en el Apéndice I, es probable que cumpla A, B o C en un periodo de 5 años	Criterio comercial Al menos una de las características siguientes (i-iv):				Apéndice I(Y/N)	Problemas de aplicación
Taxón	*i*	*ii*	*iii*	*iv*	*V*	*i*	*ii*	*iii*	*iv*	*i*	*ii*		*i*	*ii*	*iii*	*iv*		
Ara macao cyanoptera	Y	Y	N1	*N1*	Y	Y	*Y*	Y	Y	Y	Y	Y	Y				Y	*Incluir subespecie por la falta de criterios para identificar aun las diferenciaciones en las subespecies*

NOTAS: 1 = En el momento de contestar el cuestionario no se contó con los criterios comerciales omitidos en la Tabla 1 del Doc. AC. 16.8 – p.10 y 11; los cuales serian buscados posteriormente con el Secretariado CITES para responder esta parte faltante. Posteriormente este fue contestado por el Dr. Eduardo Iñigo al tener la información faltante del Secretariado CITES.

Parte II: UICN Criterios de Amenaza: El Criterio sobre la categoría de amenaza de *Ara macao cyanoptera* en México fue revisado según los últimos criterios de UICN disponibles hasta el 9 de febrero de 2001 los cuales fueron aprobados durante la 40 reunión del Consejo de UICN el 30 de Noviembre de 1994.

Para México *Ara macao cyanoptera* tendría que ser clasificada por los criterios UICN como: CR (A_{1a}, A_{1b}, A_{1c}, A_{1d}, A_{1e}, A_2, C_1, E), donde la reducción de la población es observada, perdida de hábitat es notoria y hay que actualizar, población reproductiva menor a 250 individuos.

Parte III Cuestionario:

a) Nombre de la Parte a la que se enviará el cuestionario: Mexico

b) Nombre del responsable del examen en el país en cuestión (véase la Notificación a las Partes No. 1999/56), incluso la dirección a la que deben remitirse los cuestionarios rellenados:

Ignacio J. March Misfut	Director Conservación Internacional (CI-Chiapas)	(961)236 58	ijmarch@yahoo.com	Blvd. Comitán 191 Col. Moctezuma. C.P. 29030 Tuxtla Gutiérrez, Chis, Méx
Eduardo E. Iñigo Elias	Subcomite Consultivo para la Conservación de los Psitacidos de México (SCCPM)	(8)317 8588	Einigo-elias@worldnet.att.net	Subcomite tecnico consultivo para la conservación, recuperación y aprovechamiento sustentable de los Psitácidos en Méx
Gerardo Carreón Arroyo	Instituto de Ecología, UNAM.	5622 9004	gca@hp.fciencias.unam.mx	Apdo. Postal 70-275, anexo al Jardín Botanico, Cd. Universitaria, C.P. 04510, Méx. D.F.
Karina Perez Reyna	Reserva de la Biosfera Montes Azules (RBMA)	(961)228 94/221 23/ 373 71	karinapr@yahoo.com	Av. Pachuca 418, Residencial la Hacienda, C.P. 29030, Tuxtla Gutiérrez, Chis, Méx
Patricia González Domínguez	El Colegia de la Frontera Sur (ECOSUR)	(967)818 83	pgonzale@sclc.ecosur.mx	Carr. Panamericana y Periferico Sur s/n C.P. 29290, San Cristóbal de las Casas, Chis, Méx
Roberto Wolf Webels	Subcomite Consultivo para la Conservación de los Psitacidos de México (SCCPM)	(22)363 156 ext. 256	rwolf@africamsafari.com reg_africam@infosel.net.mx	11 Ote. 2407, C.P. 72007 Puebla, Pue, México

Abenamar Pozos	Instituto de Historia Natural y Ecología, Gobierno-Chiapas	(961)447 00/447 01	zoomat@chiapas.net	Calz. Cerro Hueco s/n, Col El Zapotal, Apdo. Postal 6, C.P. 29000, Tuxtla Gutiérrez, Chis, Méx
Katherine Renton	Instituto de Biología, UNAM	52 3351 0202	krenton@ibiologia.unam.mx	Estación de Biología Chamela, Inst de Biol, UNAM. Apdo. Postal 21, C.P. 48980, San Patricio Melaque, Jal, Méx
Juan Cornejo	Africam Safari (Curador de Aves)	(22) 363 156 ext. 254	cornejo_juan@hotmail.com	11 Ote. 2407, C.P. 72007 Puebla, Pue, México
Luis Chavéz	Corredor Biológico Mesoamericano	(9) 611 2256	cbmchis@elsitio.com lachc2@elsitio.com	C. Guanajuato 379, Residencial la Hacienda, C.P. 29030, Tuxtla Gutiérrez, Chis, Méx
Ramón Guerrero	Conservacion Internacional - Chiapas	(961) 236 58		Blvd. Comitán 191 Col. Moctezuma. C.P. 29030 Tuxtla Gutiérrez, Chis, Méx
Gerardo Cartas Heredia	Instituto de Historia Natural y Ecología	(961) 447 00	zoomat@chiapas.net	Calz Cerro Hueco s/n, Col El Zapotal, Apdo. Postal 6, C.P. 29000, Tuxtla Gutiérrez, Chis, Méx
Rafael Lombera	Comunidad Chajul, Chiapas - Estación Chajul			Estación Chajul, Chis, Méx, Reserva de la Biosfera Montes Azules
Adrián Reuter Cortés	TRAFFIC North America - México	286 56 31 ext. 216	areuterwwfmex@mexis.com	Av. México 51, Col. Hipodromo condesa, C.P. 06100, Méx, D.F.
Ruth Jimenez Cruz	Conservacion Internacional - Chiapas	(961) 236 58	rjimenez@ci-mexico.org.mx	Blvd. Comitán 191 Col. Moctezuma. C.P. 29030 Tuxtla Gutiérrez, Chis Méx

c) Información que debe proporcionar el responsable del examen:

- Nombre del taxón (incluida toda la información taxonómica a que se hace alusión en el Anexo a la Resolución Conf. 9.24):

Ara macao cyanoptera

- Área de distribución: México

- Resumen de los datos comerciales: México tiene un comercio ilegal de guacamayas provenientes de estado silvestre de las poblaciones de Chiapas y Oaxaca. Hasta la fecha se encuentran ejemplares a la venta en el mercado negro en las ciudades de México, Monterrey y Guadalajara principalmente. El precio de un ejemplar en la ciudad de México puede oscilar entre los $15,000 y $20,000 mil pesos. Desde los añós 1970s está prohibido comerciar la guacamaya roja en México si proviene de estado silvestre. Distintas Guacamayas rojas e híbridos con otras especies se reproducen principalmente en cuatro en criaderos registrados ante la SEMARNAT en la Republica Mexicana: Los Reyes Edo de Méx; Cancún, Q. Roo; Queretaro, Qro; y Tijuana, B.C.

- Toda la información disponible de otras fuentes:

Iñigo-Elias, E. E. y M. Ramos, 1991. The psittacine trade in México. Pp. 380-392 in: J. G. Robinson and K. H. Redford (eds.). Neotropical wildlife use and conservation. University of Chicago Press, Chicago. 520 pp;

Iñigo Elias, E. E., J. Ayala., F. Ornelas., J. J. Perez-R., L. Eguiarte. y M. A. Ramos, 1988. Psittacine Birds in México. Ponencia presentada en "2nd World Conference on Conservation of Neotropical Parrots (ICBP)". Curitiba, Brazil. Oct 1988.

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Iñigo Elias y Carreón, en prep. The scarlet macaw *Ara macao* (aves: psittacidae): natural history and conservation threats. Oryx.

Carreón, G. y Iñigo-Elias. 1998. Reporte y estrategia del taller trinacional para la conservación de la Guacamaya Roja (*Ara macao*) en la Selva Maya, del 28 al 30 de septiembre de 1998. San Cristóbal de las Casas, Chiapas, México. 40pp.

Carreón Arroyo, G. E. Iñigo Elias, E. E., 1999. Ecología y Biología de la Conservación de la Guacamaya Escarlata (*Ara macao*) en la Selva Lacandona, Chiapas, México. Reporte final sin publicar para el Fondo Mexicano para la Conservación de la Naturaleza (FMCN), B1-97/009. México, D.F.

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d) Información que debe solicitarse a la Parte respecto de:

- A fines de comunicación: el nombre y la dirección de la persona que proporcione información sobre las especies de que se trate: Eduardo E. Iñigo Elias einigo-elias@worldnet.att.net

- Situación actual de la población: Declinando, amenazada por la cacería ilegal y captura de adultos y jóvenes para el mercado de mascotas. Destrucción de selvas riparías y fragmentación de hábitat.

- Información sobre las tendencias de la población: Estimaciones de la población en la Cuenca del Usumacinta (Salinas y Lacantún hasta Yaxchilan) muestreos anuales entre 1983 y 2001 por Eduardo E. Iñigo Elias: 1984 = 600 individuos; 1985 = 750 individuos; 1987 = 550 individuos; 1988 = 350 individuos; 1989 = 300 individuos; 1990 = 300-250 individuos; 1991 = 280 individuos; 1993 = 200 individuos; 1997 = 230 individuos; 1998 = 200 individuos; 2000 = 210 individuos; 2001 = 200 individuos

- Correcciones /adiciones a la información proporcionada por el país concernido: Recientemente UICN considera que esta especie, particularmente la población de norte de centro America (*Ara macao cyanoptera*) deberia de ser puesta como en peligro de extinción debido a el trafico de ejemplares y la destrucción de su habitat y declinación tan dramatica de las poblaciones silvestres en Belice, Guatemala, Honduras y México. Para mayor información ver: Snyder, N., McGowan P., Gilardi, J y Grajal A. (eds) (2000). Parrots. Status Survey and Conservation Action Plan 2000-2004. IUCN. Gland, Switzerland and Cambridge, UK. X + 180 pp.

- Preferencias en materia de hábitat: Selvas altas perenifolias y medianas subcaducifolias junto a la orilla de rios con vegetación riparia

- Información sobre la legislación (si es posible) que ampara la especie a escala nacional: Especie excluida del calendario de aprovechamiento de aves canoras y de ornato hasta su ultima publicación en 1999; incluida como especie en peligro de extinción en la NOM 059-84 de especies Mexicanas amenazadas: Información sobre la legislación (si es posible) que ampara la especie a escala internacional: Especie incluida en CITES Apéndice I donde México es miembro.

- Información sobre el comercio nacional: No se permite el comercio con ejemplares silvestres hasta ahora. Sin embargo, existe la amenaza de que se abra el comercio debido a los cambios en la legislación nacional al salir publicada la Nueva Ley General de Vida Silvestre y la implementación del Programa de Unidades de Manejo UMAs.

- Medidas de gestión existentes: Guacamayas sin Fronteras, investigaciones en el estado de Chiapas por Eduardo E. Iñigo Elias y Gerardo Carreón, así como los esfuerzos de Conservación Internacional Chiapas y la Dirección General de la Reserva de la Biosfera de Montes Azules en Chiapas. Faltan mas esfuerzos con la población remanente en el estado de Oaxaca.

- Cría en cautividad conocida: Distintas guacamayas rojas e híbridos con otras especies se reproducen principalmente en cuatro en criaderos registrados ante la SEMARNAT en la Republica Mexicana: Los Reyes Estado de México; Cancún, Quintana Roo; Queretaro, Queretaro; y Tijuana, Baja California.

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AGRADECIMIENTOS

Este documento ha implicado mucho esfuerzo tanto de expertos mexicanos como de expertos de nuestros países vecinos Guatemala y Belice. En especial agradecemos la colaboración del Dr. Eduardo Iñigo Elías y los comentarios del M. en C. Octavio R. Rojas Soto.

Es importante aclarar que no hemos recibido comentarios de las Autoridades Científicas de Guatemala y Belice, así como de los otros países del área de distribución de la guacamaya roja (*Ara macao*).

Falco peregrinus (peregrine falcon)

Prepared by: United States of America
U.S. Fish and Wildlife Service, Division of Scientific Authority

Taxon: *Falco peregrinus*
Kingdom: Animalia
Phylum: Cordata
Class: Aves
Order: Falconiformes
Family: Falconidae

Summary: In July 1999, the CITES Animals Committee agreed to undertake a review of some species listed in the CITES appendices to determine their current biological and conservation status. The objective of the review is to determine whether the current listing of the species is an accurate reflection of its trade and biological status. The peregrine falcon (*Falco peregrinus)* was selected for review. The peregrine falcon was first listed in CITES Appendix I in July 1975. This report evaluates the current status of the species against the listing criteria (Conf. 9.24 Annex 1) based on a review of the scientific literature and a survey sent to range countries.

The peregrine falcon (*Falco peregrinus*) has 19 recognized subspecies. It breeds in habitats ranging from tropics to tundra, deserts, marine habitat, and altitudes up to 4000 m. Northern temperate and Arctic zone falcons migrate to Central Argentina and Chile. Eurasian subspecies migrate to Central Africa, South Asia, and Indonesia (White 1994).

The peregrine falcon is no longer globally threatened. It is not included in the *2000 IUCN Red List of Threatened Animals* (Hilton-Taylor 2000) nor is it listed by BirdLife International (2000). It has been listed in CITES Appendix I since 1975. Declines in the mid-1960s through the 1970s were due to eggshell thinning and breakage, embryo mortality, and some adult mortality from contamination by chlorinated hydrocarbons and mercury used as pesticides (Cade 1982). Organocholorines are now banned in most countries. In the 1980s, the total breeding population was estimated at 12,000-18,000 pairs (White 1994). Although not listed in *Birds to Watch 2: The World List of Threatened Birds* (Collar et al. 1994), the authors caution that some subspecies may be valid species and would, therefore, deserve greater consideration in IUCN classification. They mention *F. p. madens*, the Cape Verde falcon, as a potential species as classified by Hazevoet (1995).

There were 30 responses to the survey from range countries (Table 4). Four surveys were received from Africa and one from Asia. Three responses were from territories (Cayman Islands, Falkland Islands, Gibraltar). Nine responses recommended transferring the species to Appendix II, two recommended removing the bird from the Appendices, and 17 responses recommended maintaining the species in Appendix I. Those that recommended transfer to Appendix II were primarily Western Hemisphere countries, whereas those that recommended retaining the current listing were mostly Eastern Hemisphere countries. Four respondents could not recommend any changes to the current listing without information about the global status of the species.
The quality of the responses was variable. Respondents ranged from field researchers to government administrators. The information provided was often incomplete or absent in some sections of the questionnaire. No attempt was made to contact the respondents for more complete information. There was clearly no consensus on definitions for terms used in the survey. Because no context for population size was given in the survey, it is difficult to discern

how large or small population size was defined or interpreted by respondents. The listing criteria, however, use the population size statements exactly as they were stated in the survey. The survey did not request justification for how this determination was made. The survey results were taken directly from the responses. The country summary text is based on information provided by the respondents.

Conclusions: This review resulted in no clear consensus on the most appropriate listing for the species. Recent scientific literature indicates that most of the peregrine falcon subspecies have populations that are stable or increasing in the wild. Trade data show that only the most common subspecies are in trade and that almost 87% of exports are captive-bred birds. Conversely, the majority of countries responding to the survey recommended that the peregrine falcon be maintained in CITES Appendix I throughout its range. Because the population is recovering but is still small in most range countries or there is a lack of monitoring, most respondents supported maintaining the peregrine falcon in Appendix I. However, many of the range countries where population sizes are greatest did not respond to the survey. Most of the respondents reported peregrine falcon populations as being widespread, small, and patchy. Although numbers in the wild are increasing, respondents expressed concern about continued species vulnerability due to pesticides, poaching, and migration risks. Peregrine falcons are protected by national and international non-CITES legislation in almost all responding countries. Some countries do allow limited national trade in captive-bred birds, primarily for falconry.

Based on the survey results, scientific literature, and discussion with experts, we recognize it may be preferable to retain the species in Appendix I due to the rarity of some subspecies or lack of monitoring in some range countries, and because of potential illegal trade in less-common subspecies that resemble abundant subspecies. However, transferring to Appendix II of one or more geographic subpopulations (i.e., Western Hemisphere) may be recommended if it would not cause enforcement difficulties. White and Boyce (1988) recognize 19 subspecies of peregrine falcons based largely on morphology. These distinctions may not be easily recognized by law enforcement officials however (Allen, pers. comm., July 2000).

There appear to be three options that we submit to the Animals Committee for consideration:

1. Maintain the species in Appendix I. Most of the birds exported have been reported as *F. peregrinus* (76.8% of the exports), which indicates that exported birds are generally not recorded to subspecies. Unless strong regulatory actions are in place in countries with rarer subspecies, there is potential for rare birds to enter trade, which may be detrimental to their survival.

2. Transfer the entire species to Appendix II with a zero quota for wild-caught birds. Most of the birds now in trade are captive-bred from subspecies that have stable or increasing wild populations.

3. Transfer (a) geographic subpopulation(s) with a zero quota on wild-caught birds. Subspecies that are good candidates for Appendix II due to stable or increasing population size, incidence in trade as captive-bred birds, few wild-caught birds in trade, reduction in threats to the wild population, and existing controls on their harvest in range countries are *F. p. peregrinus*, *F. p. anatum*, *F. p. pealei*, *F. p. calidus*, *F. p. tundrias*, *F. p. cassini*, and *F. p. pelegrinoides*. Subspecies that are rare in the wild, not bred in captivity, are found in restricted ranges, or of which there is little information on their status in the wild should remain in Appendix I. These include *F. p. furuitii*, *F. p. ernesti*, *F. p. nesiotes*, and *F. p. radama*. If the Animals Committee decides to pursue this option, additional information should be collected for each of the subspecies.

Falco peregrinus (peregrine falcon)

Prepared by: United States of America

U.S. Fish and Wildlife Service, Division of Scientific Authority

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Kingdom: Animalia
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Introduction: In July 1999, the CITES Animals Committee agreed to undertake a review of some species listed in the CITES appendices to determine their current biological and conservation status. The objective of the review is to determine whether the current listing of the species is an accurate reflection of its trade and biological status. The peregrine falcon (*Falco peregrinus*) was selected for review. The peregrine falcon was first listed in CITES Appendix I in July 1975. This report evaluates the current status of the species against the listing criteria (Conf. 9.24 Annex 1) based on a review of the scientific literature and a survey sent to range countries.

Literature Review

General Biology: The peregrine falcon (*Falco peregrinus*) has 19 recognized subspecies. It breeds in habitats ranging from tropics to tundra, deserts, marine habitat, and altitudes up to 4000 m. It feeds primarily on birds, but also consumes bats, rats, other small mammals, reptiles, crustaceans, and insects. Over 300 species of birds are eaten by peregrine falcons in the Northern Hemisphere. Breeding seasons depend on the subspecies. Laying occurs in February and March in the northern temperate zone, April through May at northern high latitudes, August through October in the Southern Hemisphere, and June through December at the Equator. Pairs establish breeding territories and do not build nests. Eggs are laid in cliff depressions, tree hollows, on the ground, and on buildings and other manmade structures. Northern temperate and Arctic zone falcons migrate to Central Argentina and Chile. Eurasian subspecies migrate to Central Africa, South Asia, and Indonesia (White 1994).

The peregrine falcon is no longer globally threatened. It is not included in the *2000 IUCN Red List of Threatened Animals* (Hilton-Taylor 2000) nor is it listed by BirdLife International (2000). It has been listed in CITES Appendix I since 1975. Declines in the mid-1960s through the 1970s were due to eggshell thinning and breakage, embryo mortality, and some adult mortality from contamination by chlorinated hydrocarbons and mercury used as pesticides (Cade 1982). Organocholorines are now banned in most countries. In the 1980s, the total breeding population was estimated at 12,000-18,000 pairs (White 1994). Although not listed in *Birds to Watch 2: The World List of Threatened Birds* (Collar et al. 1994), the authors caution that some subspecies may be valid species and would, therefore, deserve greater consideration in IUCN classification. They mention *F. p. madens*, the Cape Verde falcon, as a potential species as classified by Hazevoet (1995).

Subspecies and Distribution (White 1994)

F. p. tundrius Arctic tundra of North America, from Alaska to Greenland.

F. p. anatum North America south of the tundra to North Mexico.

F. p. pealei Coastal western North America from Washington to Alaska and through the Aleutian and Commander Islands.

F. p. cassini West South America from Ecuador south through Bolivia and northern Argentina to south Chile, Tierra del Fuego, and the Falkland Islands.

F. p. japonensis Northeastern Siberia south to Kamchatka and Japan.

F. p. furuitii Volcano Island and possibly Bonin Island.

F. p. calidus Eurasian tundra from Lapland to Siberia.

F. p. peregrinus Eurasia south of the tundra and north of the Pyrenees, Balkans, and Himalayas and from the British Isles to far eastern Russia.

F. p. brookei Southern France, Spain, and coastal north Africa through the Mediterranean and Caucasus.

F. p. babylonicus Asia from eastern Iran to Mongolia.

F. p. pelegrinoides Canary Islands east through inland North Africa to Iraq and possibly Iran.

F. p. madens Cape Verde Islands.

F. p. minor Sub-Saharan Africa and north into extreme southern Morocco.

F. p. radama Madagascar and Comoro Islands.

F. p. peregrinator Pakistan, India, and Sri Lanka east to southeast China.

F. p. ernesti Indonesia and Philippines east to New Guinea and the Bismarck Archipelago.

F. p. nesiotes Vanuatu and New Caledonia east to Fiji.

F. p. macropus Australia except southwest.

F. p. submelanogenys Southwestern Australia.

Peregrine falcon numbers, ranges, and threats to survival appear to be more extensively studied in Europe and North America. The lack of biological information in other geographic areas, particularly in tropical areas, may be due to the inaccessibility of the eyries (Quinn and Kokorev 2000, White et al. 1988). Often the breeding and nesting sites are so remote that there are no roads or river systems that allow access. In addition, since the peregrine falcon is typically not a ground-nesting bird, it is difficult to census from the ground.

In Africa, peregrine falcons can easily be confused with other falcons. While the populations of *F. p. pelegrinoides*, *F. p. minor*, and *F. p. calidus* have probably been stable over the past two centuries, the populations are predicted to decline due to rapid human population growth, clear-cutting, and more widespread use of pesticides (Mendelsohn 1988, Platt 1988). *F. p.*

pelegrinoides has been trapped for falconry, but there are no records of numbers or prices according to Platt (1988).

F. p. minor, the African peregrine falcon, is one of the smallest peregrine falcons and is distributed over 5,000 km north to south in dry to mesic and cool to hot climates (White *et al.*, in press). This subspecies has only been studied in detail in Zimbabwe, Namibia, Kenya, and South Africa. The population seems to occur in small regional clusters. The African peregrine falcon is considered scarce, and population estimates are largely based on the presence of appropriate habitat. Recent reports from areas of the range not previously explored seem to indicate that the birds are not as uncommon as has been reported in the literature. White *et al.* (in press) suspect that the estimated population of 1,000 to 2,000 pairs (Mendelsohn 1988) for sub-Saharan Africa may be low. The African peregrine falcon population may have always been low. Low clutch size may be affected by seasonal food availability or habitat reduction. In general, the population seems stable and unaffected by agricultural pesticides used in much of its range (Hartley et al. 1996).

Little is known about *F. p. madens*, the Cape Verde peregrine falcon, but it is considered rare. It is only found in the Cape Verde Islands (Hazevoet 1998). In 2001, 10 adults and one fledgling were seen, but no immature birds were observed (White *et al.*, in press). Threats to this subspecies have not been identified.

In Victoria, Australia, human activities have had a positive effect on the distribution of nesting peregrine falcons. Since 1950, 12% of the nests are on human-made structures and 51% are on natural cliffs. However, 37% of nest sites are in hollow trees. Tree rot and destruction of large trees will probably occur at a more rapid rate than tree replacement (Emison et al. 1997) and could affect population recruitment.

The peregrine falcon populations appear to be stable or increasing in most of North America (United States of America and Canada). In Canada, *F. p. anatum* increased from the 1970s to 1995 coinciding with decreased use of organochlorine pesticides (Kirk and Hyslop 1998). Peale=s peregrine falcon (*F. p. pealei*) is found along the Aleutian and Queen Charlotte Islands and possibly along the Gulf of Alaska. The subspecies has a long, thin, and linear distribution along the coasts and may have some of the highest densities among peregrine falcons. There may be around 2,800 adults in mid-winter. Although the population was not affected by DDT-related eggshell thinning of the 1960s-1980s, DDE and PCB chemicals concentrated in plastic resin pellets found in North Pacific waters may pose a future threat to some of the sub-populations (White *et al.*, in press). For wintering, the *F. p. tundrius* and *F. p. anatum* populations migrate south to Mexico, Central, and South America. They can spend up to seven months in the Neotropics along coastal areas mixed with semi-deciduous tropical forest, mangroves, and dunes (Kiff 1988, McGrady, *et al.* in press, White *et al.* 1989).

According to the U.S. Fish and Wildlife Service (USFWS), Division of Migratory Bird Management, there are three subspecies in the United States of America. *F. p. pealei* is a non-migratory population found in the British Columbia and Washington coastal area. This subspecies was never listed under the U.S. Endangered Species Act (ESA). There are over 200 known pairs (400-500 estimated) of *F. p. tundrius* in Alaska, over 200 known pairs (2000 estimated) in Canada, and about 200 pairs (1,500-2,000 estimated) in Greenland (White *et al.*, in press). Based on these estimates, there is an estimated *F. p. tundrias* population of 4,000-5,000 pairs. This subspecies was delisted from the ESA list in 1994.

F. p. anatum is widespread from the interior of Alaska through south Canada and most of the lower 48 states. Due to organochlorine pesticide restrictions in the United States of America and Canada as well as successful management activities, the population is well above recovery levels, with 1650 known pairs (2,500-3,000 estimated, White *et al.*, in press).

Recovery goals for American peregrine falcons in the United States of America were substantially exceeded in some areas, and in August 1999 the American peregrine falcon (*F. p. anatum*) was removed from the U.S. List of Endangered and Threatened Wildlife and Plants. However, monitoring of the status of the species is required and ongoing, and it is still protected under the Migratory Bird Treaty Act.

Delisting *F. p. anatum* from the U.S. List of Endangered and Threatened Wildlife removed the designation of endangered due to similarity of appearance for any free-flying peregrine falcon within the 48 contiguous states. A 12-year monitoring program is being developed to survey population trends, nesting success, and contaminant exposure. At the end of the monitoring period, the USFWS will review the status of the species and determine if re-listing or continued monitoring are necessary.

In May 2001, the USFWS Division of Migratory Bird Management approved a management plan allowing for take up to 5% *F. p. anatum* nestlings produced in the States west of 100B longitude, at the discretion of each State. The Service determined that the level of take is conservative and will not significantly impact the species. Take refers only to personal use for falconry and not for commercialization. Healthy populations of *F. p. anatum* are found in the western United States of America and Alaska, where recovery was most marked and where approximately 82% of the nesting pairs in the United States of America were found in 1998.

In Mexico, the peregrine falcon has been considered an endangered species since the early 1980s because its breeding population has declined over most of its range since the 1960s and major threats (e.g., pesticide pollution, illegal trade, habitat destruction) continue to affect its habitat and wild populations (Kiff 1988, Iñigo and Dominguez 1989, Iñigo-Elias 2000). There are two known breeding populations of peregrine falcons, one on the Pacific Cost of Baja California and the Gulf of California (Porter *et al* 1988, Castellanos et al. 1989) and a second population in the complex system integrating the Chihuahuan Desert-Mexican Central Plateau bordered by both Sierra Madre Occidental and Oriental (Hunt *et al* 1988). The population of peregrine falcons along the central west coast of the Baja California peninsula declined during the 1960s and 1970s, but has begun to recover. Human disturbances still need to be minimized and nesting sites need to be provided (Castellanos et al. 1997). Based on 1988 data, it is estimated that South America has at least 1000 pairs, which is larger and healthier than previously thought (McNutt et al. 1988). Peregrine falcon reproductive rate is high and pesticide residues are low throughout Chile, Argentina, Peru, and Ecuador. The only breeding subspecies in South America is *F. p. cassini* (McNutt et al. 1988).

The number of known breeding pairs in Russia and the former Soviet Union republics appear to be variable. In the Western Caucasus, 24 peregrine falcon pairs have been observed (Til=ba and Mnatsekanov 1998), which is believed to be a considerable increase since 1990. The majority of breeding pairs are in nest sites that are far from human disturbance. In Vaigach Island in northern Russia, the peregrine falcon was a common breeding species until the 1960s. The population declined until the middle of the 1980s. Use of organochlorines may have been responsible for the decline. Three nests were observed in 1991 (Morozov 1998). In the Ural Mountains and adjoining areas, the peregrine falcon declined throughout its range, with the highest number of birds observed in the mountain-forest zone of the Southern Ural (Karyakin 2000). In 1997, 319 nesting territories were observed in the Ural area (approximately 600,000 sq. km). The red-naped shaheen population (*F. p. babylonicus*) in Turkmenistan has declined from tens of breeding pairs after World War II to fewer than 20 pairs in the 1980s and 10 to 12 pairs in the 1990s (Sopyev 1999). About 35-50 pairs of *F. p. babylonicus* were estimated for the Soviet central Asiatic republics (Cade 1988). This subspecies is listed in the Red Data Book of the former USSR (1984) and Turkmenistan (1985).

The most widespread subspecies in northern Eurasia east of the Urals is *F. p. calidus* (Kolosov 1983). Although the population declined due to pesticide use, it has been increasing since the late 1970s (Quinn et al. 2000). The population is still believed to be below carrying capacity with 406 km^2 per territory. There may be as many as 3,652 territories across the range of the red-breasted goose (*Branta ruficollis*), with which peregrine falcon populations have nesting associations (Quinn and Kokorev 2000).

Very little is known about peregrine falcon biology and population dynamics in Asia and the Pacific. In most of Southeast Asia, the species is probably uncommon and there is no information on clutch size, fledgling rates, and adult replacement (White et al. 1988). The Iwo peregrine (*F. p. furuitii*), the rarest of the peregrine falcon subspecies, is found on the volcanic Iwo Islands of Japan. Due to the inaccessibility of the islands except through the Japanese Self Defense Force, little is known of the subspecies= biology, population, and threats (White *et al.*, in press). White *et al.* suggest that a current assessment of the entire Iwo group is needed to determine if the birds still exist. Many authors do not recognize *F. p. furuittii* as a subspecies and include it with *F. p. pealei* or *japonenis*.

F. p. ernesti, Ernest=s peregrine falcon, is another subspecies of which little is known (White *et al.*, in press). It is the darkest subspecies and occurs from Indonesia and the Philippines east to New Guinea and the Bismarck Archipelago. The Island (Melanesian) peregrine falcon (*F. p. nesiotes*) is also a dark subspecies and is found in the islands of Fiji, Vanuatu, and New Caledonia (White *et al.*, in press). The birds are residents that do not tend to move among island groups. Population estimates of this subspecies are largely unknown due to the difficulty of accessing breeding sites, however, of the number of breeding pairs and occupancy rate of the eyries observed, there appears to be a downward trend (White *et al.* 2000). A captive-breeding program for reintroduction is occurring at Kula Eco Park in coordination with the National Trust for Fiji (letter to the U.S. Office of Scientific Authority from the Ministry of Local Government, Housing and Environment, Fiji, 1999).

In Pakistan, the peregrine falcon is now scarce, but widespread in winter in the Indus Plains. The species is a frequent visitor to Nepal; it is widespread in India and uncommon. It is uncommon in Bhutan, a scarce winter visitor in Bangladesh, rare in Sri Lanka, and an infrequent winter visitor in the Maldives (Grimmett et al. 1998). In India, *F. p. calidus* is a winter visitor in the subcontinent, *F. p. peregrinator* is a resident, and *F. p. babylonicus* is a breeder in northern and western Pakistan with wintering territories in northwest India (Grimmett et al. 1998). *F. p. peregrinator*, the Indian peregrine or black shaheen, has a very low breeding population in Sri Lanka (Döttlinger and Hoffmann 1999). At least 40 breeding pairs were observed (1 pair for every 1,625 km^2), but not all breeding areas were logistically accessible to the authors. This compares to 1 pair of *F. p. peregrinus* per 565 km^2 in Bavaria and 1 pair for every 174 km^2 in Baden-Württemberg (areas of Germany roughly the size of Sri Lanka). The authors did not identify threats to the population. Prey and nest site availability were not limited.

Trade Information:

This review focuses on live birds exported and does not include eggs, scientific specimens, feathers, or other parts. According to WCMC trade data, between 1995 and 1999, seven subspecies were in trade. Of live birds reported, *F. p. peregrinus*, *anatum*, *pealei*, *calidus*, and *tundrias* were exported (Table 1). One captive-bred *F. p. cassini* and four captive-bred *F. p. brookei* were reported as being imported, but there were no corresponding export reports. Most of the 1,088 live peregrine falcons exported were listed as *F. peregrinus* (76.8% of the exports), which indicates that exported birds are generally not recorded at the subspecies level. Most of the birds were captive-bred (86.7%) and few were wild-caught (8.1%) (Table 2). Only 0.7% were reported as being of unknown origin.

Exported live birds originated from 25 countries, although two wild-caught birds originated from an unknown source. The largest sources of birds were Canada (24.4%), Germany (17.5%), Austria (14.1%), the United Kingdom (10.4%), the United Arab Emirates (8.5%), and the United States of America (6.9%) (Table 3). There were few wild-caught birds exported from these countries. Only one of the Canadian birds, two of the Austrian birds, and none of the birds from Germany or the United Kingdom were wild-caught.
The largest exporters of wild-caught birds were the United Arab Emirates, which exported 60.7% (54 birds), and the United States of America, which exported 11.2% (10 birds). Captive-bred peregrine falcons were traded heavily in the Middle East in the 1970s, but falconers preferred wild-caught birds due to established training methods for wild birds and the low performance of the captive-bred birds (Barton 2000). Consequently, few captive-bred peregrines are sold in the region. One estimate of the number of peregrine falcons imported into the United Arab Emirates was based on the total number of peregrine falcons visiting the Dubai Falcon Hospital for the first time. The number increased by 12.5% from 1993 through 1998 (Barton 2000).

Table 1. Number of exported live peregrine falcons by subspecies as reported to WCMC.

Subspecies	**1995**	**1996**	**1997**	**1998**	**1999**
F. p. anatum	30	22	7	0	2
F. p. calidus	0	1	1	0	1
F. p. pealei	80	12	19	14	19
F. peregrinus	106	164	175	209	182
F. p. peregrinus	1	11	7	2	19
F. p. tundrias	0	0	4	0	0
Total	217	210	213	225	223

Table 2. Number of exported live peregrine falcons by source as reported to WCMC.

Subspecies	**Total**	**Captive bred**	**Captive bred for commercial purposes**	**Captive born**	**Wild Caught**	**Other**
F. p. anatum	61	4	55	2	0	0
F. p. calidus	3	0	1	2	0	0
F. p. pealei	144	23	91	22	4	4
F. peregrinus	836	551	178	22	81	4
F. p. peregrinus	40	31	8	1	0	0
F. p. tundrias	4	0	0	0	4	0
Total	1,099	609	333	49	89	8

Table 3. Origins and sources of live peregrine falcon exports from 1995 through 1999 as reported to WCMC.

Country of Origin	Total	Captive bred	Captive bred for commercial purposes	Captive born	Wild Caught	Other
Australia	2	2	0	0	0	0
Austria	153	84	66	1	2	0
Belgium	7	7	0	0	0	0
Canada	265	54	206	4	1	0
Czech Republic	46	39	4	2	1	0
Denmark	43	34	0	9	0	0
Fiji	2	0	0	0	2	0
France	9	9	0	0	0	0
Germany	190	136	54	0	0	0
Hungary	9	9	0	0	0	0
Ireland	6	2	0	0	4	0
Morocco	2	0	0	0	2	0
Mexico	4	0	0	0	4	0
The Netherlands	4	4	0	0	0	0
Norway	2	0	0	0	2	0
Poland	1	1	0	0	0	0
Slovakia	1	0	0	0	1	0
South Africa	39	39	0	0	0	0
Spain	13	12	0	0	0	1
Sweden	6	0	0	3	3	0
Switzerland	1	1	0	0	0	0
Tanzania	1	0	0	0	1	0
United Arab Emirates	92	37	0	0	54	1
United Kingdom	113	110	3	0	0	0
United States of America	75	29	0	30	10	6
Unknown	2	0	0	0	2	0
Total	1088	609	333	49	89	8

Survey Methods:

A survey was sent to all 109 range country Scientific Authorities in early 2000 to seek information on the status of the species and recommendations on possible changes to the species= listing status. It was available in English, French, and Spanish. Results were collected through the end of December 2000. Following the Animals Committee meeting in December 2000, additional information was requested from peregrine falcon biologists and several countries that had not previously responded to the survey. The survey questions reflected the language used in *Biological Criteria for Appendix I* (Conf. 9.24, Annex 1). However, interpretation of the survey criteria may have been subjective. For example, what may have been considered a Asmall@ population may vary among respondents. Definitions were not provided with the survey based on the assumption that respondents would refer to available CITES references and scientific literature.

Results:

There were 30 responses to the survey from range countries (Table 4). Four surveys were received from Africa and one from Asia. Three responses were from territories (Cayman Islands, Falkland Islands, Gibraltar). Nine responses recommended downlisting to Appendix II, two recommended removing the bird from the Appendices, and 17 responses recommended maintaining the species in Appendix I. Those that recommended downlisting were primarily Western Hemisphere countries, whereas those that recommended retaining the current listing were mostly Eastern Hemisphere countries. Four respondents could not recommend any changes to the current listing without information about the global status of the species.

The quality of the responses was variable. Respondents ranged from field researchers to government administrators. The information provided was often incomplete or absent in some sections of the questionnaire. No attempt was made to contact the respondents for more complete information. There was clearly no consensus on definitions for terms used in the survey. Because no context for population size was given in the survey, it is difficult to discern how large or small population size was defined by respondents. The listing criteria, however, use the population size statements exactly as they were stated in the survey. The survey did not request justification for how this determination was made. The survey results were taken directly from the responses. The country summary text is based on information provided by the respondents.

Survey Responses (Refer to Table 4 for country codes)

I Area of distribution

Please indicate which of the following best describes the status of the peregrine falcon in your country (choose only one):

4 The wild population has a widespread and continuous distribution. GI, IT, LI, CH

16 The wild population is widespread, but has a patchy or fragmented distribution. AU, BE, CA, CR, ET, FK, FR, KY, KE, MX, NO, PE, SI, TM, GB, US

6 The wild population has a restricted area of distribution. DK, FI, HU, LI, NA, SE

3 Do not know. CO, ER, LK

II Population size

Please indicate which of the following best describes the status of the peregrine falcon in your country (may choose more than one):

6 The wild population is large. CA, CR, CH, IT (over 600 pairs), LI (CH& LI, 250 pairs), US

16 The wild population is small. AU (3,000 pairs), BE, KY, DK, FK (500-900 pairs), FI (100-120 pairs), FR (600-800 pairs), GI, KE, LI (2-10 pairs), NO (350 pairs), NA (150 pairs), PE, SI, TM, GB (1283 pairs), ZW (200 pairs)

2 Sub-populations are very small. HU (2 pairs), SE (60-80 pairs)

1 The majority of individuals, during one or more life-history phases, are concentrated in one sub-population. HU

5 Do not know. CO, ER, ET, LK, MX

III Population trends

1. If available, please provide details of programs in your country for the monitoring of the peregrine falcon (such programs may be conducted by the government, non-governmental organizations or scientific institutions).

2. Which of the following best describes the status of the peregrine falcon in your country (choose only one):

   13 Number of individuals in the wild has increased. BE, Southern CA, DK, FK, FR, HU, IT, LU, LI, NO, CH, SE, GB, US

   7 Number of individuals in the wild has remained stable. AU, Northern CA, CR, FI, GI, SI, ZW

   4 Number of individuals in the wild has decreased. ET, MX, PE, TM

   6 Do not know. CO, ER, KE, KY, LK, NA

3. If the wild population has declined, such trend has been either:

   ____ observed as ongoing or as having occurred in the past (but with a potential to resume); or

   ____ inferred or projected on the basis of the following:

   4 decrease in area or quality of habitat ET, KE, MX, PE

   1 levels or patterns of exploitation PE

   ____ threats from extrinsic factors such as the effects of pathogens, competitors, parasites, predators, hybridization, introduced species and the effects of toxins and pollutants

   2 decreasing reproductive potential. FR, MX

IV Threats

1. The wild population of the peregrine falcon is characterized by the following (may choose more than one):

11 fragmentation or occurrence at very few locations. BE, CO, KY, DK, HU, LU, MX, NO, PE, SI, SE

3 large fluctuations in the area of distribution or the number of sub-populations. IT, KY, PE

19 high vulnerability due to the species' biology or behaviour, including:

- 9 migratory species CO, CR, FI, KE, KY, LK, NO, PE, TM
- 5 has low fecundity AU, FI, KE, MX, TM
- 1 high juvenile mortality NO
- 3 slow growth FI, MX, NO
- 1 delayed reproduction FI
- 5 habitat specialization FI, HU, LU, SI, ZW
- 13 other *Pesticides* (AU, CR, IT, MX, SE, TM, ZW), *Breeding Site Vulnerability* (LU, MX), *Poaching* (MX, SE, TM, GB, ZW), DRAUGHT (NA)

16 an observed, inferred or projected decrease in any one of the following:

- 2 area of distribution PE, SE
- ——— number of sub-populations
- 5 number of individuals GI, MX, PE, NA, SE
- 8 area or quality of habitat CR, ER, KE, LK, MX, SI, GB, ZW
- 1 reproductive potential GI

Comments (If you need additional space, please use a separate sheet of paper):

Egg Collection (FI, SI), *Falconry* (FI, TM), *Paragliding* (LI, CH), *Poisoning of prey species or directly* (FR, IT), *Rock Climbing* (LI, CH, FR, SI), *Shooting* (FR)

2. The status of the peregrine falcon is such that if the species is not included in Appendix I, it is likely to satisfy one or more of the above criteria within a period of five years.

11 Yes (BE, ER, ET, FR, HU, LU, MX, PE, LK, SI, SE)
13 No (AU, FK, FI, GI, IT, KE, NO, NA, CH, LI, GB, US, ZW)

Comments: No opinion - KY, Question unclear- CA, CO

V Legislation

1. Is the peregrine falcon protected or managed by national laws?

26 Yes (AU, BE, ET, FR, KY, CR, DK, FK, FI, HU, GI, IT, KE, LI, LU, MX, NO, NA, PE, CH, LK, SE, TM, GB, US, ZW)

3 No (CA, CO, ER)

2. If yes, please provide information (as detailed as possible) relating to the conservation and management of the peregrine falcon in your country.

3. Aside from CITES, is the peregrine falcon protected or managed by other international treaties or laws?

20 Yes (BE, ET, KY, DK, FK, FR, FI, GI, HU, IT, LU, LI, MX, NO, PE, CH, SI, SE, GB, US)

7 No (AU, CA, CO, ER, KE, NA, ZW)

1 Don=t know (CR)

4. If yes, please provide detailed information relating to the conservation and management of the peregrine falcon on the international level.

5. In our view, the current listing of the species in Appendix I is:

17 appropriate, based on Resolution Conf. 9.24. BE, CO, DK, ER, ET, FR, FI, GI, HU, LU, MX, NO, PE, LK, SI, SE, TM

11 inappropriate, based on Resolution Conf. 9.24.

8 Species should be in Appendix II. CA, CR, CH, IT, KE, LI, NA, US, ZW

2 Species should not be listed in the CITES Appendices. CH, LI

Comments: No opinion - AU, KY, FK, GB

VI Trade

1. Is the peregrine falcon traded domestically?

16 Yes (BE, CA, CR, DK, FR, IT, LI, MX (illegally), NA (illegally), PE (illegally), CH, SI, SE (illegally), GB, US, ZW)

13 No (AU, CO, ET, KE, KY, ER, FK, FI, GI, HU, LU, NO, TM)

1 Data not available (LK)

2. If traded domestically, please describe:

a. purposes of trade

Falconry - BE, CA, DK, FR, IT, MX, NA, GB, US, ZW

Captive Breeding - CA, SI, GB, US

Taxidermy - DK

Exhibition - GB

Pets - MX, PE

b. trade levels and/or trends

Increasing - SI, GB

Moderate - IT, MX

Low - BE, FR, PE, US, ZW

Unknown - CA, LK

c. impact of trade on the wild populations

High - PE, SI

Low - BE, FR, IT, MX

None - CA, NA, GB, US

3. What is the source of specimens in trade? Please indicate the total number or percentage of specimens in trade from the following sources:

Removed as adults from the wild GB, IT (10%), ZW

_____ ranched

Bred in captivity BE, CA, FR, HU, CH, IT (90%), LI, NA, GB, US, ZW

Questionnaire comments are below. The response author is in italics.

Australia

Cindy Steensby, Australian CITES Scientific Authority: The wild population is widespread with a patchy distribution and is small (3,000-5,000 pairs in Australia). The population is monitored by individual researchers with banding permits. The population has remained stable, although it has declined locally in Tasmania and New South Wales. Use of DDT and low fecundity are continuing threats. The species is not listed nationally as threatened or endangered, so its protection and management is provided by the states and territories. All states and territories in Australia provide legal protection to peregrine falcons. The only trade in raptors occurs between wildlife and zoological parks, although there is still some (but declining) illegal shooting, trapping, and poisoning. There is no domestic trade. Organochlorine pesticide use is banned or severely restricted. The respondent supports downlisting to **Appendix II** for Australia, but needs the world view before recommending downlisting for the global population.

Belgium

F. Areis, CITES Belgium: The wild population is widespread with a patchy distribution and is very small (13 pairs present in 2000, 10 bred successfully, and 30 young fledged). The population is being monitored and nest boxes built by the Fund for Intervention on Raptors. Number of wild individuals is increasing. The bird is protected by EC Annex A (highest level of protection) and Belgian regional legislation. The respondent supports retaining the species in **Appendix I.** There is domestic trade for falconry with no known effects on the wild population, and all birds in trade are captive-bred.

Canada

Dr. Geoff Holroyd (Research Scientist, Chair of Canadian Peregrine Recovery Team): The wild population is widespread, but has a patchy or fragmented distribution. Although the population lives in habitat patches, the distribution has not isolated any population because the birds can travel over 600 km. The wild population is large with over 1000 pairs. The population is surveyed once every 5 years, with nests surveyed annually in southern Canada. The number of individuals in the wild is increasing in southern Canada and is stable in

northern Canada. The peregrine falcon is managed and fully protected by provincial and territorial wildlife agencies. CITES is the only international law affecting the bird in Canada. The respondent believes listing the species in Appendix I is **inappropriate** based on Resolution Conf. 9.24 and that the species should be listed in **Appendix II.** It is traded domestically for falconry and captive breeding. All trade is of captive-bred falcons, which are traded and sold with appropriate permits.

Cayman Islands

Ministry of Agriculture, Communications, Environment & Natural Resources, Cayman Islands: The wild population is widespread with a patchy distribution. The peregrine is an uncommon migrant in Fall and Spring. Because it is an incidental visitor, there are no monitoring programs. Since the species is not local, **no opinion** is offered on CITES status. Cayman Islands law prohibits take of this species. International laws are the Protocol Concerning Specially Protected Areas and Wildlife (SPAW) to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. The peregrine falcon is also listed in Appendix II of the Convention on the Conservation of Migratory Species of Wild Animals.

Colombia

Filipe Estela, Asociación Calidris: There is no monitoring program of this species in Colombia, so population size, trend, and area of distribution is unknown. There is, however, a raptor migration monitoring program in Fredonia. Threats to the population are habitat fragmentation and vulnerability during migration. There are no national laws or international laws other than CITES known to protect the species. The bird is not traded domestically. The respondent recommends leaving the peregrine falcon in **Appendix I**.

Costa Rica

Julio E. Sanchez, Carman Hidakio, and Johnny Villarreal, National Museum of Costa Rica: The population is widespread, but patchy. The peregrine falcon is not a resident, but passes through Costa Rica during migration to and from South America. The population is large and stable, but there are no monitoring programs in place. Pesticides are still a threat. There is national legislation that prohibits its hunting or capture. The respondent recommends listing in **Appendix II**. The species is traded domestically.

Denmark

Morten Dehn, Danish Cites Management Authority: The wild population has a fragmented and restricted distribution. The population is small and non-breeding, but may be breeding in the near future as two pairs have established home ranges. Up to 10 pairs bred in Denmark until 1950, but declined due to pollutants and persecution. The number of individuals is increasing. There were 25-30 wintering birds and 235 migratory birds in 1995. There are no current monitoring programs at a Government, non-government, or scientific institutional level. The bird is protected by national laws and EU Council Directive 79/409/EEC on the Conservation of Wild Birds. The respondent supports **Appendix I**. The species is traded domestically for taxidermy, falconry, and export of hybrids.

Eritrea

Hagos Yohannes, Ministry of Agriculture: Occurs mainly in the eastern coastal lowlands, but its population status and trends are unknown. Drought and war may have affected peregrine falcon habitat, but no surveys have been done. The respondent prefers to keep the species

listed in **Appendix I** until scientific information is collected. There are no national or international laws affecting the bird=s protection and no trade is known to exist.

Ethiopia

M. Abdi, Ethiopian Wildlife Conservation Organization: The wild population is widespread and patchily distributed. Although the population size is unknown, it is believed to be decreasing. The decline is due to less habitat area or quality. There are national laws protecting the peregrine falcon as well as the Convention on the Conservation of Migratory Species of Wild Animals. The species is not traded domestically, but should be maintained in **Appendix I**.

Falkland Islands

T.W. Eggeling, Environmental Planning Department: The wild population is widespread with a patchy distribution. Breeding residents are mostly along the coasts; some may migrate. The respondent notes that there is a small wild population with between 500 and 900 pairs (recorded from 1983-1993), but there is no regular monitoring. The population has been increasing since 1917. No threats are known. The species is protected under the Conservation of Wildlife and Nature Ordinance of 1999, which prohibits disturbance, kill, or take of any live or dead animal or part. The peregrine falcon is also protected by Annex A of EC Regulation 338/97. While not threatened in the Falkland Islands, **no opinion** is offered without looking at the global situation.

Finland

Dr. Risto A. Väisänen, Zoological Museum: The wild population is restricted to two areas with 90% breeding in large peatlands and 10% in cliffs. The population is small with 100-130 pairs. The population was stable in the 1990s, increased from the 1980s, and is monitored by the Forest and Park Service. The peregrine falcon is vulnerable as a migratory species with low fecundity, slow growth, delayed reproduction, and its reliance on peatland for nesting (Finland only). Most serious threats are foreign egg collectors and falconers. It is not traded domestically. Using IUCN criteria, the falcon will be critically endangered in Finland from 2000 onward. The species is regulated by the EU as a species of special concern. There are also national laws protecting the species. The respondent notes unfavorable conservation status of the species in Europe, although it is globally not concentrated in Europe. Maintain in **Appendix I**.

France

Dr. Jeane-Fraucin Voisin, Laboratorie de Zoologia, National Museum of Natural History: The wild population is widespread and patchily distributed. It is considered small at 600-800 pairs, but is increasing. The low number is due to low reproductive potential, poisoning of prey species or the bird itself, mountain-climbing activities, and some shooting. The population is monitored by a formal monitoring program coordinated by the FIR-LPO. The only reason the peregrine falcon has not been extirpated from France is due to effective national and international laws. Captive-bred peregrine falcons are traded domestically for falconry, but trade levels are low and do not impact wild populations. Maintain in **Appendix I**.

Gibraltar

John Cortes, Ph.D., The Gibraltar Ornithological and Natural History Society (GONHS): The wild population is small, widespread, and continuous. There are five nesting pairs on the island, and nest sites are monitored by GONHS. The number of individuals remains stable and is limited by the size of the available habitat. The wild population is affected by the number

and reproductive potential of individuals. The species has full protection under the Nature Protection Ordinance (1991) and is not traded domestically. **Appendix I** is considered appropriate.

Hungary

CITES Management Authority of Hungary: The wild population is very small with most individuals concentrated in one subpopulation. The range of the birds is restricted. The peregrine falcon disappeared from Hungary in 1964 and naturally repopulated in 1997. One pair bred in 1997, there was no breeding in 1998, and two pairs were observed in 1999 and 2000. Although the number of individuals has increased, there is no formal monitoring program because the population is still very small. Threats include fragmentation at very few locations and habitat specialization. The peregrine is listed as strictly protected in Hungary by *Decree No. 1/1982 (III.15.) OKTH on the Protected and Strictly Protected Species of Flora and Fauna, Value of their Specimens, Determination of the Range of Protected and Strictly Protected Caves and Exemptions from Restrictions and Prohibitions Set for Certain Protected Animal Species*, last amended by the 15/1996 (VII.26.) Decree of the Minister for Environment. It is also protected by the Nature Conservation Act No. 53 of 1996, Article 43, which requires National Park Directorate authorization for all uses of the animal or its parts. Government Decree No. 8/1998 (1.23.), Detailed Rules on Protection, Keeping, Display and Utilisation of Protected Species, prohibits keeping, displaying, or utilizing Strictly Protected Species. Exemptions are made for peregrine falcons and other raptor species for falconry, but these birds must be captive-bred and marked by microchip transponders. Species hybridization is prohibited. The species is also protected by the Bern Convention, Appendix II, AStrictly Protected Fauna Species@, and the Bonn Convention, Appendix II. The respondent feels that **Appendix I** is appropriate for this species.

Italy

Dr. Alessandro La Posta, Il Dirigente Della Divisione II: The wild population is widespread and continuous except for the Padania Plain in Northern Italy. The population size is considered large at over 600 pairs and stable in most areas. The population is increasing in northern and central Italy. There are large population fluctuations in the distribution areas of subpopulations, which may be due to the continued use of pesticides in Africa affecting prey species that migrate into the Mediterranean region. The status of the peregrine falcon in Italy does not satisfy the biological criteria for Appendix I, and the species should be downlisted to Appendix II. The falcon is protected by National Law M0157 of 1992, Appendix II of the Bonn Convention, and Directive 79/403. There is moderate collection and domestic trade for falconry, but the impact of trade on the wild populations is low. About ten percent of the birds in trade are removed from the wild as adults from the wild; 90% are captive-bred. It is estimated that 20-40 nests are robbed each year, but this factor has declined in the last 20 years.

Kenya

Leon Bennun, Ph.D., Ornithology Department, National Museums of Kenya: The wild population is small and widespread, but has a patchy or fragmented distribution. Subspecies *F. p. minor* is a localized breeding resident, usually near cliffs in open country. Palearctic migrants of *F. p. calidus* is regular and widespread from October through April, especially on passage along the coast. There is no information on monitoring programs or population trends, but it is likely that the population has decreased over the last 20 years due to reduced habitat availability. The species is known to nest in urban areas. Continuing threats include *F. p. calidus* being migratory and both subspecies having low fecundity; however, the respondent believes the threats do not appear severe enough in Kenya to warrant maintaining

the species in Appendix I. The peregrine falcon is fully protected nationally by the Wildlife Conservation and Management Act. National parks and reserves protect substantial amounts of suitable habitat. This species is not traded domestically. Other than CITES, no other international law protects the peregrine. The respondent believes the species should be listed in **Appendix II**.

Luxembourg

Patric Lorgé, Centrale Ornithologique: The wild population has a restricted distribution area and is between 2 and 10 pairs. The population is monitored year-round by the Raptor Group of Luxembourgish League for the Protection of Birds and Nature. The population was extinct in the early 1960s. Releases in Germany led to the first breeding (1998) and the population has increased since then. The birds are threatened by habitat fragmentation, specialization, and vulnerability at breeding sites. Protection is regulated by the Nature Conservation Law of 1982 and the Wild Birds Directive 79/409/CE of the EU. Maintain in **Appendix I**. There is no domestic trade of this species.

Mexico

Dr. Eduardo E. Iñigo Elias, Ornithologist and raptor biologist on behalf of the CITES Animal Committee of Mexico (CONABIO): The wild breeding population is restricted to two main areas: one in Baja California on the Pacific and Gulf of California coasts and the second in the complex system integrating the Chihuahuan Desert-Mexican Central Plateau bordered by both Sierra Madre Occidental and Oriental, in both it has a patchy distribution. Another wintering population, *F. p. tundrius* spends over five to seven months on the coast of the Gulf of Mexico during the non-breeding season (August-April). Mexico does not have an annual survey established by the government. However, published research suggests that the breeding population may still be declining particularly in the complex system integrating the Chihuahuan Desert-Mexican Central Plateau bordered by both Sierra Madre Occidental and Oriental. Only 56 breeding sites are known there. There are still threats to population growth such as poaching and environmental toxins such as DDE due to the use of organochlorine products, such as DDT in malaria control. The species is protected under Mexican legislation by the Norma Oficial Mexicana 050-84 as an Endangered Species. Falconry is allowed with some restrictions on the number of peregrines permitted per person. Illegal trade of Peregrine Falcons is a constant threat to both breeding and wintering populations in Mexico. Last year the Mexican Attorney for the Environment (PROFEPA) seized over 16 peregrine falcons and aplomado falcons from an American-Mexican breeder facility that had illegally captured these birds. Internationally, the species is protected under the Migratory Bird Treaty of the United States, Canada, and Mexico. The respondent supports continued listing of the Peregrine Falcon in **Appendix I** as a precaution since the population is still low, threats are continued or increasing, and there are no current surveys of the population. The option to Adownlist the entire species to Appendix II with a zero quota for wild-caught birds@ may represent a threat to wild populations, because as has been well documented in the USA, Canada, Mexico and Europe, some falcon breeders have recently laundered wild caught birds as captive bred birds within their facilities.

Namibia

R.E. Simmons, Ministry of Environment and Tourism: The wild population is small and has a very restricted area of distribution. Arid zones with low precipitation and mostly sandy beaches with few rocky areas for nesting are not conducive to a large population. The only rocky areas adequate for nesting are in the western half of Namibia. The population is estimated at no more than 150 pairs. There are no formal monitoring programs, so the population trend is unknown. The long-term drought in an already arid landscape and the few

individuals in one subpopulation are threats to the population. In 1999-2000, however, there were good rains. More individual birds have been observed in the city as the pigeon population has increased. The respondent does not see any anthropogenic threats that would restrict the birds to Appendix I and downlisting to **Appendix II** is recommended. The national law that protects the peregrine is Nature Conservation Ordinance #4 of 1975. There is no legal trade, although there was one case where a captive-bred bird from Cape Town was shipped illegally to Namibia for falconry. The bird was confiscated.

Norway

Oystein Stoerkersen, Directorate for Nature Management: The wild population is widespread and has a patchy coastal distribution. The small wild population is above 1000 pairs. Regional annual monitoring programs are performed by the National Ornithological Society and Norwegian Institute of Nature Research. The population is increasing. There is still some juvenile mortality and slow growth, which could be threats to population growth. The species protected by the Wildlife Act, which includes a ban on falconry. Internationally, it is protected by the Bern Convention, Appendix II. The respondent supports continued listing in **Appendix I** as a precaution since the population is still low.

Peru

Josefiná Takahashi Sato, Ph.D., Chief of INRENA, Autoridad Administrativa y Científica CITES-Peru: The wild population is small, widespread, and distributed in patches. Although there are no monitoring programs in Peru, the number of individuals has probably decreased due to less habitat availability and levels of exploitation. The species is also vulnerable since it is migratory. It is protected by a national law, Supreme Decree No. 013-99-AG. There is some illegal trade for use of the falcon as a pet (about three adults removed from the wild per year), but it has a high impact on the wild population. Maintain in **Appendix I**.

Slovenia

Robert Boljesic and Martina Nacichik-Jancar, Ministry for the Environment and Spatial Planning and DOPPS-Birdlife Slovenia: The population is small and limited in its widespread distribution to rock walls. The population is stable and monitored by DOPPS-BirdLife Slovenia. Threats listed include habitat fragmentation or occurrence at very few locations, habitat specialization, and reduced area or quality of habitat. In Slovenia, the peregrine falcon nests only in rock walls. The popularity of free-climbing on rock walls represents a major threat to the species. Because control of trade is insufficient, birds are captured for breeding. Breeders are also a threat to the wild population since they are known to take eggs and chicks. Escaped birds have been observed. The respondents feel that this may affect the gene pool of the wild population and decrease reproductive potential. There is no management program for the peregrine falcon. Slovenia ratified the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention or CMS) and the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention). The peregrine is listed in the appendices of both treaties. The Decree on the Protection of Endangered Animal Species (OJ RS, Nr. 57/93) is the national legislation protecting the species since 1993. Falconry is prohibited. Human activities in nesting areas of the Carst region are also prohibited. Exposed breeding sites are guarded by DOPPS. Legal trade of the bird occurs. There are eight breeders in Slovenia and the number is increasing. A permit can be issued by the Minister for the Environment for possession of captive-bred specimens, but this has also presented problems.

Sri Lanka

A.P.A. Gunasekera, Director, Department of Wildlife Conservation: The population size, trend, and distribution are unknown. Habitat quality has decreased. The species is vulnerable because it is migratory. It is protected by national laws. Trade data is unavailable, and the current **Appendix I** listing is appropriate.

Sweden

Lena Berg, Naturvardsverleet (SEPA): The wild population has a restricted area of distribution with small subpopulations. The population is increasing, partly due to a restocking program. The population decreased to 10-15 pairs in the 1970s as a result of environmental contamination. A breeding program was established in 1979 and birds have been released into the wild since the 1980s. There are now 40-50 pairs in the northern subpopulation and 20-30 pairs in the southern subpopulation. Continuing threats include illegal hunting and trade. The species has been totally protected since 1957. Dead and injured birds are the property of the state. There is no legal trade. Keeping and trade is controlled by national law, EU regulations, and the Bern Convention. Monitoring is done by non-governmental organizations with financial support from the Swedish EPA. Supports continued listing in **Appendix I**.

Switzerland and Liechtenstein

Peter Dollinger, DVM, Ph.D., Head, Division Permits and Inspections, Swiss Federal Veterinary Office: The population is widespread with a continuous distribution. Peregrines are breeding throughout Switzerland on cliffs and tall buildings, but not above 1800 m above sea level. The wild population is large (population increased 800% in the last 20 years) with birds as migrants, winter visitors, and residents. There are 250 breeding pairs. Monitoring is done by bird watchers and coordinated by the Swiss Ornithological Station at Sempach. The peregrine falcon is breeding in the Canton of Zurich today after being considered extinct in the area from 1963 to 1988. The range is expanding. The only threats are paragliding and rock-climbing. The bird is nationally protected in both countries as well as by EU ABirds Directive@ (Council Directive 79/409/EEC) and the Convention on the Conservation of Migratory Species of Wild Animals (Bern Convention). The respondent believes it should be listed in **Appendix II** or not listed since the worldwide population is recovering, the birds breed easily in captivity, and Switzerland has not discovered or prosecuted a single illegal export in 24 years. There is no commercial trade in this species, including captive-bred specimens.

Turkmenistan

Djumamurad Saparmuradov: The population is widespread, has a patchy distribution, and is small. The species status is monitored by the National Institute of Deserts, Flora, and Fauna. The wild population is decreasing due to poaching, falconry, and pesticide use in nesting areas in Russia. This affects the wintering population arriving in Turkmenistan. The species is protected by national laws. Harvesting and trade are prohibited as they are listed in the Red Data Book of Turkmenistan. The respondent prefers retaining the species in **Appendix I**.

United Kingdom

Joint Nature Conservation Committee: The population is widespread, patchy, and small. The most recent survey (1991) showed 1283 pairs in nesting territories and 4750 individuals. The United Kingdom population accounts for 20% of the peregrines west of the Urals and is considered small by CITES, since there are fewer than 5000 individuals. Volunteer monitoring shows an overall increase of the population, although the species has declined in some areas

or not recovered to pre-1940 numbers. Threats include loss of habitat, less prey availability, persistent pollutants, and illegal killing and taking. There is still a demand from Germany and the Middle East for illegally taken eggs and chicks. Peregrine falcons are protected by the Wildlife & Countryside Act in Great Britain and the Wildlife Order (Northern Ireland). It is illegal to destroy nests, collect or sell, or transport any live wild peregrine falcon. Peregrine falcons are also protected from intentional or reckless disturbance at or near the nest. Other international protections include COTES (Control of Trade in Endangered Species), EC Directive 79/409/EEC, and EC Council Regulation 338/97. The respondent **reserves opinion** until there is a global overview of the bird=s status. Captive-bred birds may be traded domestically for falconry, captive breeding, and display; wild-disabled or confiscated/seized birds might also be permitted to be used for breeding or educational display purposes. No licences are currently issued for the taking of peregrine falcons from the wild, and none have been issued in over 10 years. Illegal trade does not seem to be harming the wild population.

United States of America

Dr. George T. Allen, Division of Migratory Bird Management, U.S. Fish and Wildlife Service: There are three subspecies in the United States. *F. p. pealei* is a non-migratory population found in the British Columbia and Washington coastal area. This subspecies was never listed under the U.S. Endangered Species Act. Based on population estimates in Canada, Alaska, and Greenland, there are 4,000-5,000 pairs of *F. p. tundrias* (White *et al.*, in press). This subspecies was delisted from the U.S. Endangered Species list in 1994.

F. p. anatum is widespread from the interior of Alaska through south Canada and most of the lower 48 states. Due to organochlorine pesticide restrictions in the United States and Canada, as well as successful management activities, the population is well above recovery levels, with 1650 known pairs. In August 1999, *F. p. anatum* was removed from the List of Endangered and Threatened Wildlife and Plants. However, monitoring of the status of the species is required and ongoing, and it is still protected under the Migratory Bird Treaty Act.

In May 2001, the USFWS Division of Migratory Bird Management approved a management plan allowing for take up to 5% *F. p. anatum* nestlings produced in the States west of 100B longitude, at the discretion of each State. The Service determined that the level of take is conservative and will not significantly impact the species. Take refers only to personal use for falconry and not for commercialization. Healthy populations of *F. p. anatum* are found in the western United States and Alaska, where recovery was most marked and where approximately 82% of the nesting pairs in the United States were found in 1998.

Dr. Bill Burnham, The Peregrine Fund: The population is widespread and patchily distributed. It is large and increasing. There are no threats to the population in the United States. The population is protected by the Migratory Bird Treaty Act (national and international law). The Peregrine Fund would like the peregrine falcon listed in **Appendix II.** It is traded domestically for falconry and captive breeding, but this has no impact on wild populations. All trade is of captive-bred falcons.

Based on the two responses received and a review of the literature, The U.S. Division of Scientific Authority recommends downlisting the peregrine falcon to **Appendix II** for the Western Hemisphere with a zero quota on wild-caught birds.

Zimbabwe

Dr. Peter Mundy, Department of National Parks: The population is widespread and continuous. The birds are found on high cliffs which are present throughout most of the country. There is a population of 200 pairs. Subspecies *Falco peregrinus calidus* visits

Zimbabwe in the northern winter. Monitoring is done by the Zimbabwe Falconer=s Club. The club has been successful in captive breeding of *Falco peregrinus minor*. The wild population is stable at historic eyries, although two pairs recently nested in two cities. Habitat specialization, past use of DDT, decreasing available habitat (deforestation near cliffs), and competition with the lanner falcon, *Falco biarmicus*, continue to threaten the population. The bird is protected on the list of ASpecially Protected Species@ under the Parks and Wildlife Act of 1975 (Revised 1996). It has recovered dramatically since DDT and dieldrin are no longer used. The species should be downlisted to **Appendix II.** It is not traded, but is used by permit domestically by the Falconer=s Club (10 birds removed from the wild, 30 produced in captivity).

Conclusions: This review resulted in no clear consensus on the most appropriate listing for the species. Recent scientific literature indicates that most of the peregrine falcon subspecies have populations that are stable or increasing in the wild. Trade data shows that only the most common subspecies are in trade and that almost 87% of exports are captive-bred birds. Conversely, the majority of countries responding to the survey recommended that the peregrine falcon be maintained in CITES Appendix I throughout its range. Because the population is recovering but is still small in most range countries or there is a lack of monitoring, most respondents supported maintaining the peregrine falcon in Appendix I. However, many of the range countries where population sizes are greatest did not respond to the survey. Most of the respondents reported peregrine falcon populations as being widespread, small, and patchy. Although numbers in the wild are increasing, respondents expressed concern about continued species vulnerability due to pesticides, poaching, and migration risks. Peregrine falcons are protected by national and international non-CITES legislation in almost all responding countries. Some countries do allow limited national trade in captive-bred birds, primarily for falconry.

Based on the survey results, scientific literature, and discussion with experts, we recognize it may be preferable to retain the species in Appendix I due to the rarity of some subspecies or lack of monitoring in some range countries, and because of potential illegal trade in less-common subspecies that resemble abundant subspecies. However, downlisting of one or more geographic subpopulations (i.e., Western Hemisphere) may be recommended if it would not cause enforcement difficulties. White and Boyce (1988) recognize 19 subspecies of peregrine falcons based largely on morphology. These distinctions may not be easily recognized by law enforcement officials (Allen, pers. comm., July 2000).

There appear to be three options that we submit to the Animals Committee for consideration:

1. Maintain the species in Appendix I. Most of the birds exported have been reported as *F. peregrinus* (76.8% of the exports), which indicates that exported birds are generally not recorded to subspecies. Unless strong regulatory actions are in place in countries with rarer subspecies, there is potential for rare birds to enter trade, which may be detrimental to their survival.

2. Transfer the entire species to Appendix II with a zero quota for wild-caught birds. Most of the birds now in trade are captive-bred from subspecies that have stable or increasing wild populations.

3. Transfer (a) geographic subpopulation(s) with a zero quota on wild-caught birds. Subspecies that are good candidates for Appendix II due to stable or increasing population size, incidence in trade as captive-bred birds, few wild-caught birds in trade, reduction in threats to the wild population, and existing controls on their harvest in range countries are *F. p. peregrinus*, *F. p. anatum*, *F. p. pealei, F. p. calidus*, F*. p. tundrias, F. p. cassini*, and *F. p. pelegrinoides*. Subspecies that are rare in the wild, not bred in captivity, are found in

restricted ranges, or of which there is little information on their status in the wild should remain in Appendix I. These include *F. p. furuitii*, *F. p. ernesti, F. p. nesiotes*, and *F. p. radama*. If the Animals Committee decides to pursue this option, additional information should be collected for each of the subspecies.

Table 4. Survey Appendix listing results.

Country or Territory Responding	**Recommendation**	**Rationale**
Australia (AU)	App. II for Australia	Needs international info.
Belgium (BE)	App. I	Small population.
Canada (CA)	App. II	Large population.
Cayman Islands (KY)	No opinion	Incidental species.
Columbia (CO)	App. I	No monitoring.
Costa Rica (CR)	App. II	Many migrants.
Denmark (DK)	App. I	Small population.
Eritrea (ER)	App. I	No monitoring.
Ethiopia (ET)	App. I	Small declining population.
Falkland Islands (FK)	No opinion	Needs international info.
Finland (FI)	App. I	Small, stable population.
France (FR)	App. I	Needs much protection.
Gibraltar (GI)	App. I	Small, stable population.
Hungary (HU)	App. I	Small, one subpopulation.
Italy (IT)	App. II	Large population.
Kenya (KE)	App. II	Less severity of threats.
Liechtenstein (LI)	App. II or remove	Large population.
Mexico (MX)	App. I	Continued environmental and trade threats.
Luxembourg (LU)	App. I	Small population.
Namibia (NA)	App. II	No anthropogenic threats.
Norway (NO)	App. I	Small population.
Peru (PE)	App. I	Decreasing population size.
Slovenia (SI)	App. I	Small population.

Sri Lanka (LK)	App. I	No data.
Sweden (SE)	App. I	Small population.
Switzerland (CH)	App. II or remove	Large population.
Turkmenistan (TM)	App. I	Poaching, pesticides, sm. population
United Kingdom (GB)	No opinion.	Needs international info.
United States of America (US)	App. II (Western Hemisphere only)	Large population.
Zimbabwe (ZW)	App. II	Large population.

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PRELIMINARY DRAFT

Review of the CITES Appendices

***Cnemidophorus hyperythrus* (Orange-throated whiptail lizard)**

Listing Status under CITES

Cnemidophorus hyperythrus, the orange-throated whiptail lizard, was listed in CITES Appendix II when CITES went into effect on July 1, 1975. As such, there is little information available on the original rationale for listing.

Species Distribution

Distribution of *Cnemidophorus hyperythrus* is limited to extreme southwestern California, Baja California, Mexico including eight islands in the Gulf of California, Mexico; and two islands in the Pacific Ocean off the coast of Baja California, Mexico (McGurty 1981). There are two subspecies of *Cnemidophorus hyperythrus* including the Cape orange-throated whiptail *C. h. hyperythrus* and Belding orange-throated whiptail *C. h. beldingi*. *C. h. hyperythrus* occurs in Baja, Mexico. The current range of *C. h. beldingi* in California is in the foothills and mountains of Los Angeles, San Bernardino, Orange, Riverside, and San Diego Counties; and in Mexico, this subspecies is found in the state of Baja California del Norte (McGurty 1981).

Background on Species or Taxon

The primary threat to *C. h. beldingi* is loss of suitable contiguous habitat in southern California, particularly in San Diego County, as a direct result of urban, commercial, and agricultural development. The majority of suitable habitat for *C. h. beldingi* occurs in the chaparral (both open and dense vegetation areas) and coastal sage scrub ecosystems at low elevations. These areas have been severely reduced due to development. In San Diego County, *C. h. beldingi* has lost 65 to 75% of its historic habitat. The remaining stronghold for this subspecies is in the pinyon-juniper habitat type, where *C. h. beldingi* has been found at elevations of approximately 6,000 ft. This subspecies has not been located at higher elevations in mixed conifer forests (McGurty 1980). Bostic (1964 and 1966) and Stebbins (1972) observed that the distribution of *C. h. beldingi* correlated with the distribution of the western subterranean termite *Reticulitermes hesperus* which is restricted to the lower coastal slopes.

There are no National or State Parks, Wildlife Refuges, or U.S. Forest Service lands within the range of *C. h. beldingi* and *C. h. hyperythrus* which provide protective boundaries for these subspecies. Currently, *C. h. beldingi* habitat at Camp Pendleton, U.S. Marine Corps Base and Miramar, U.S. Naval Air Station in southern California is threatened by the proposed construction and operation of a new regional airport. It is expected that one of these sites will be selected and further loss of *C. h. beldingi* habitat will ensue (McGurty 1981).

The current population status of *C. h. beldingi* is unknown; however, McGurty (1980) described the status of this subspecies in San Diego County as “seriously depleted”. *C. h. beldingi* is further threatened by a short season of activity (adults enter into hibernation as early as July) and low reproductive potential. This subspecies reaches sexual maturity in the spring following hatching the previous summer and females two years of age or older deposit two clutches of eggs per year. The mean clutch size, however, is only 2.3 eggs with a

maximum of 3 eggs (Bostic 1964, 1965). Juvenile survival and recruitment rates have not been studied.

Existing threats to *C. h. beldingi* my be further exacerbated by commercial trade; commercial trade in both *C. h. beldingi* and *C. h. hyperythrus* is believed to continue despite the legal protection afforded these subspecies by the State of California. *Cnemidophorus hyperythrus* is listed as "Protected" by the State, and permits to collect and/or possess these subspecies are only granted for scientific purposes. Additionally, the sale of all native species in California is prohibited and permits for the sale of native reptiles by biological supply houses to scientific and educational institutions must be permitted by the California Department of Fish and Game. However, species designated as protected do not receive the habitat protection afforded to state-listed endangered and threatened species, including the requirement to determine the impacts from projects on the habitats of these species and the determination of mitigative measures prior to project implementation.

Export and import of *Cnemidophorus spp.* has been recorded by the U.S. Fish and Wildlife Service, Division of Law Enforcement, LEMIS database. Table 1 outlines the number of live specimens reported as exported and imported in 1991, 1994, 1995, and 1996. These figures represent minimum numbers of specimens. Some of these may include specimens of *Cnemidophorus hyperythrus*.

The number and dollar value of live specimens of *Cnemidophorus hyperythrus* reported as exported and imported in 1996 and 1997 were recorded in the U.S. Fish and Wildlife Service, Division of Law Enforcement, LEMIS database (Table 2).

Documented international trade in *Cnemidophorus hyperythrus* has included the import of 37 specimens by the United States of America from Mexico in 1980; import of 112 specimens to the Unites States of America from Mexico in 1985; export of 25 specimens by the United States of America to Japan in 1996; export of 11 scientific specimens by Mexico to the United States of America in 1996; and export of 96 in 1997.

Table 1. Number of live specimens of *Cnemidophorus spp.* reported as exported and imported in 1991 through 2000.

Year	No. of Live *Cnemidophorus spp*. Exported	No. of Live *Cnemidophorus spp*. Imported
1991	1809	
1994	856	
1995	1316	450
1996	508	916
TOTAL	**4489**	**1366**

Table 2. Number and Dollar Value of Live Specimens of *Cnemidophorus hyperythrus* Exported and Imported Between 1996 and 2000.

Year	No. of Live Specimens Exported	Dollar Value of Live Specimens Exported	No.of Live Specimens Imported	Dollar Value of Live Specimens Imported
1996	25	$200.00	7	$0.00 Biol. Spec.
1997	96	$312.00		
TOTAL	**121**	**$512.00**	7	**$0.00**

Preliminary Evaluation:

Based on the continued threats to *Cnemidophrus hyperythrus* from habitat loss and fragmentation in southwestern California due to urban, commercial, and agricultural development, limited distribution of suitable habitat, and reported international trade in this species in the past 5 years, *Cnemidophrus hyperythrus* appears to qualify for retention in Appendix II of CITES, pursuant to Resolution Conf. 9.24. Its retention in Appendix II also appears to be warranted as a precautionary measure.

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