REVIEW OF SIGNIFICANT TRADE

ANALYSIS OF TRADE TRENDS WITH NOTES ON THE CONSERVATION STATUS OF SELECTED SPECIES

ANNEX A: MAMMALS

Prepared for the

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by the

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World Conservation Monitoring Centre

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1. Pteropus vampyrus

FAMILY **PTEROPODIDAE**

COMMON NAME(S) Large Flying-fox (English); Zorro volador de cuello rojo (Spanish)

GLOBAL CONSERVATION STATUS LR/lc (Chiroptera Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Brunei Darussalam: Found throughout lowland coastal areas, occasionally invading the interior during the fruiting season (Payne *et al.*, 1985).
Cambodia:
India: Occurrence reported (Corbet and Hill, 1992)
Indonesia: Occurrence reported (Corbet and Hill, 1992)

Java: 'Tidemann *et al.* (1990) recorded it from islands in the Krakatau group off west Java. Bats were seen to move between the islands. A single specimen was seen roosting in a *Casuarina* (Casuarinaceae) tree and a colony of 250 roosted in *Terminalia* (Combretaceae) trees on Sertung in 1985 but none were seen in 1986. In the same region, Dammerman (1948) observed large numbers of *Pteropus* moving between Sebesi and Sebuku. At Bogor Gardens, west Java, it roosted in a variety of trees, including dead ones, in groups of hundreds of individuals (Kitchener *et al.*, 1990)' (Mickleburgh *et al.*, 1992).

Kalimantan: Found throughout lowland coastal areas, occasionally invading the interior during the fruiting season (Payne *et al.*, 1985).

Lesser Sundas: Savu, Timor: 'Goodwin (1979) observed a spectacular colony of 2000 adults of both sexes near Metinar, Timor, in a dense mangrove forest which extended for about 8 km along the coast' (*Pteropus vampyrus malaccensis)* (Mickleburgh *et al.*, 1992).

Bali, Lombok, Sumbawa: *P. v. pluton*: (Mickleburgh *et al.*, 1992).

Sumatra: Found quite commonly in the Padang Highlands up to 914m (*Pteropus vampyrus malaccensis*) (Mickleburgh *et al*, 1992).

?Lao People's Democratic Republic: Occurrence reported (Duckworth *et al.*, 1999).
Malaysia: Occurrence reported (Corbet and Hill, 1992)

Peninsular Malaysia: Widespread but declining in forest areas *(Pteropus vampyrus malaccensis)* (Mickleburgh *et al.*, 1992). A severe decline in the abundance and distribution of *Pteropus vampyrus* is occurring throughout peninsular Malaysia suggesting that unregulated hunting and habitat loss are the primary reasons for the decline in abundance of this species (Mohd-Azlan *et al.*, 2001).

Sabah: 'Found throughout lowland coastal areas, occasionally invading the interior during the fruiting season' (Payne *et al.*, 1985). 'C. M. Francis (pers. comm.) reports that flock sizes in Sabah appear to have become smaller over the past 10 years, possibly indicating a decline' (Mickleburgh *et al.*, 1992).

Sarawak: 'Found throughout lowland coastal areas, occasionally invading the interior during the fruiting season' (Payne *et al.*, 1985).

Myanmar: Occurrence reported (Corbet and Hill, 1992).
Philippines: Occurrence reported (Corbet and Hill, 1992). Widespread and locally common in primary lowland forest up to 1250m, also foraging in adjacent agricultural areas. Formerly occurred in many large colonies, but these are now greatly reduced in size and number. Heavily hunted and declining substantially (Heaney *et al.*, 2002).

Pteropus vampyrus lanensis, which is endemic to the Philippines, is heavily hunted, both at its conspicuous roosts and in orchards. Declines in mixed *Pteropus/Acerodon* roosts from 100,000 per camp in the 1920s to the 500-1000 reported currently indicate drastic falls in population numbers. It is possible that *Pteropus vampyrus lanensis* could be extinct within the Philippines in the next 20 years, although it is more likely that small populations would persist in isolated areas. Although it may be able to persist in agricultural habitats, heavy hunting pressure is causing a serious decline on many islands throughout the country. Most captures are for local consumption, but, in recent years, the large demand for fruit bats on Guam has resulted in havey trade in large fruit bats, and a small number fo these have been *Pteropus vampyrus lanensis* (Mickleburgh *et al.*, 1992).
Singapore: Occurrence reported (Harrison, 1974).
Thailand: Occurrence reported (Corbet and Hill, 1992). *Pteropus vampyrus intermedius*: No information on status (Mickleburgh *et al.*, 1992). *Pteropus vampyrus malaccensis*: 'Recorded from the coastal area of the peninsula and the south-east coast as far north as Korat, with records from the provinces of Chon Buri, Krabi and Nakhon Si Thammarat (Lekagul and McNeely, 1977; Yenbutra and Felten, 1986)' (Mickleburgh *et al.*, 1992).
Tonga:
Vanuatu:
Viet Nam: Occurrence reported (Corbet and Hill, 1992).

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INTERNATIONAL TRADE

Gross Exports of *Pteropus vampyrus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Malaysia	Bodies	0	0	0	0	0	0	0	0	1	0	0
Brunei Darussalam	live	0	0	0	1	0	0	0	0	0	0	0
Indonesia	live	0	0	0	0	1400	1250	0	0	12	0	30
Malaysia	live	0	24	0	0	55	55	0	0	0	0	0
Indonesia	Meat (kg)	0	0	200	0	0	0	0	0	0	0	0
Malaysia	Skins	0	0	0	0	0	1	0	0	0	0	0

Export Quotas for *Pteropus vampyrus* for years 1997-2002 as submitted to the CITES Secretariat

Country	Term	1997	1998	1999	2000	2001	2002
Indonesia	live			90	1000	1000	1000
Indonesia		1350	475				

COMMENT

Populations in Philippines are declining but there is no reported trade for this country. Widespread but declining in Malaysia but not due to trade. Most of the trade is coming out of Indonesia but levels of trade have been low since 1997 and the Indonesian trade is within its quota. No information on status in Indonesia but given that trade has been low since 1997 and within the quotas the species is not considered a priority for review.

2. Delphinapterus leucas

FAMILY **MONODONTIDAE**

COMMON NAME(S) Beluga (English); White whale (English); Bélouga (French); Dauphin blanc (French); Ballena blanca (Spanish)

GLOBAL CONSERVATION STATUS VU A1abd (Cetacean Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Beluga whales are distributed throughout seasonally ice-covered arctic and subarctic waters of the Northern Hemisphere (Gurevich, 1980) and are closely associated with open leads and polynyas in ice-covered regions (Hazard, 1988). Annual migrations may cover thousands of kilometers (Reeves, 1990).

"This circumpolar species was formerly abundant throughout the Arctic and Subarctic. There may still be in the order of 150,000 White Whales in total (IWC, 2000; NAMMCO, 2000), but many of the 29 stocks provisionally

recognized by the IWC Scientific Committee have been seriously reduced by hunting. Even these depleted [sub]populations continue to be hunted and are therefore at risk of being extirpated." Reeves *et al*. (2003).

Belgium: Occurrence reported (de Smet, 1974).
Canada: Occurrence reported (Hall, 1981). The population at Ungava Bay has been estimated at under 50 individuals individuals and the eastern Hudson Bay population at around 1,000 individuals (Kingsley, 2000). The Cumberland Sound [sub]population in the eastern Canadian Arctic numbers only several hundred whales but continues to be hunted (Reeves *et al.*, 2003).

There is also concern about many other White Whale populations. The St. Lawrence River [sub]population of perhaps 1,200 animals may be increasing slowly but remains vulnerable owing to its low numbers, restricted range, and exposure to marine traffic and contaminants (Kingsley, 1998; Kingsley, 2001; Lesage and Kingsley 1998; Michaud and Béland 2001).
Denmark:
Estonia: Occurrence reported (Ernits, 1986).
Finland:
France:
Germany:
Greenland: The Belugas in West Greenland have been estimated at around 2,000 individuals (Kingsley, 2000).
Japan:
Lithuania: Occurrence reported (Skeiveris, 1992).
Netherlands:
Norway:
Poland:
Russian Federation: Occurrence reported (Bannikov and Sokolov, 1984). In the Russian Federation, where almost half of the 29 provisional stocks of belugas spend at least part of the year, there is less infrastructure for hunt management and population assessment. Studies of stock structure, abundance, and contaminants in Russian belugas should be a high priority (Cetacean Specialist Group, 1996). Another concern is that in 1999, 13 tons of Beluga meat were exported to Japan for commercial use, and further shipments were planned. This initiative ended when export permits covering the additional shipments were abruptly withdrawn (Marine Mammal Commission, 2000), but the event signals the potential for resumed commercial hunting of Belugas in Russia, whether solely as a meat-for-export enterprise, or combined with live-capture operations to supply foreign oceanaria (Cetacean Specialist Group, 1996).
Svalbard and Jan Mayen:
Sweden:
United Kingdom:
United States: Occurrence reported (Hall, 1981). Five stocks of beluga whales are recognized within US waters: 1) the Cook Inlet stock, 2) the Bristol Bay stock, 3) the Eastern Bering Sea stock, 4) the Eastern Chukchi Sea stock, and 5) the Beaufort Sea stock. During the winter, beluga whales occur in offshore waters associated with pack ice. In the spring, they migrate to warmer coastal estuaries, bays, and rivers for molting (Finley, 1982) and calving (Sergeant and Brodie, 1969). Some, if not all, of the Cook Inlet stock may inhabit Cook Inlet year-round (Hansen and Hubbard, 1999), while the other stocks winter in the Bering Sea (NMML, 2003). The Belugas in Cook Inlet, Alaska are estimated at around 350 individuals (Kingsley, 2000).

"The Cook Inlet stock of beluga whales is a small isolated stock that is geographically and genetically segregated from the other four stocks of belugas found in Alaskan waters (O'Corry-Crowe *et al.*, 1997; Laidre *et al.*, 2000). This stock is especially vulnerable to deleterious impacts from large or persistent harvests or changes to their environment (Mahoney and Shelden, 2000; Moore *et al.*, 2000). Each summer since 1993, the National Marine Fisheries Service (NMFS) has conducted systematic aerial surveys of the Cook Inlet stock of beluga whales (Rugh *et al.*, 2000). Results of these surveys indicated that both the distribution and abundance of the Cook Inlet beluga stock were declining, while reported harvests by Native hunters had increased. Abundance estimates dropped from 653 in 1994 to 347 in 1998, nearly a 50% decline during the survey period (Hobbs *et al.*, 2000a; Hobbs *et al.*, 2000b). In the summer of 1998, the Native hunt for belugas ceased, and since then abundance estimates (367 in 1999, 435 in 2000 and 389 in 2001) have stopped declining (Hobbs *et al.* 2000a)" (NMML, 2003).

Aquatic Distribution: Arctic Sea, northeast and northwest Atlantic and northeast and northwest Pacific.

The major threats to Belugas are harvesting for food, trade, water pollution (affecting the habitat and/or the species) and human disturbance such as transport (Cetacean Specialist Group, 1996). In addition to the threat of over-hunting, the constant increase in vessel traffic is a concern, especially in some of the northern bays and estuaries where White Whales congregate in the summer and autumn. Local and regional management bodies exist in Canada, Greenland, and Alaska, with the expectation that they will ensure the conservation of Belugas for the sustainable benefit of maritime aboriginal hunting communities. Their record of accomplishing this mandate is variable (Cetacean Specialist Group, 1996).

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INTERNATIONAL TRADE

Gross Exports of *Delphinapterus leucas*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Canada	Bone carvings	0	0	1	0	0	0	0	0	0	0	0
Canada	Carvings	0	0	1	0	0	5	0	1	0	0	0
Canada	live	4	0	0	0	0	1	0	0	0	0	0
Canada	Meat	0	0	0	0	0	0	0	0	0	1	0
Canada	Meat (kg)	0	0	0	0	0	0	0	0	0	3.5	0
Canada	Skin pieces	0	0	0	0	0	0	17	0	0	0	0
Canada	Skull	0	0	0	0	1	0	0	0	0	0	0
Canada	Skull (kg)	0	0	0	0	0	0	0	0	0	6	0
Canada	Teeth	0	51	0	0	0	0	0	114	0	8	0
Greenland	Bones	0	34	234	3	0	1	2	0	0	0	0
Greenland	Bones (kg)	0	0	0	9	0	0	0	0	0	0	0
Greenland	Carvings	0	0	10	11	16	11	0	1	0	0	0
Greenland	Carvings (kg)	0	0	0	4	0	0	0	0	0	0	0
Greenland	Meat	0	1	0	1	1	1	0	0	0	0	0
Greenland	Meat (kg)	2651.6	200	40	1062.6	578.85	814	585	0	0	0	40.5
Greenland	Skin pieces	0	27	232	0	0	0	0	0	0	0	0
Greenland	Skin pieces (kg)	0	0	0	10	0	0	0	0	0	0	0

Greenland	Skull	0	2	0	0	0	0	0	0	0	0	0
Greenland	Teeth	1	0	14	12	0	65	0	516	0	0	0
Norway	Skin pieces	0	0	0	0	0	0	0	40	0	0	0
Russian Federation	live	0	4	0	0	0	2	12	25	13	12	3
Russian Federation	Meat (kg)	0	0	0	0	0	0	0	13200	0	0	0
Saudi Arabia	live	0	0	0	0	0	0	0	1	0	0	0
United States	Extract	0.003	0	0	0	0	0	0	0	0	0	0

COMMENT
Trade has been relatively low since 1999. However, populations appear to be declining and are thought to be negatively affected by trade as well as other threats. This species is therefore recommended for review.

3. Monodon monoceros

FAMILY **MONODONTIDAE**

COMMON NAME(S) Narwhal (English); Narval (French); Narval (Spanish)

GLOBAL CONSERVATION STATUS DD (Cetacean Specialist Group, 1996).

DISTRIBUTION AND LOCAL CONSERVATION STATUS

The Narwhal is endemic to Arctic waters, where three stocks have traditionally been recognized: one centered in Baffin Bay; one in northern Hudson Bay; and one in the Greenland Sea and eastward. Future research is expected to reveal further stock structure (IWC, 2000; NAMMCO, 2000).

Canada: Abundance estimates include about 35,000 in the Baffin Bay-Davis Strait region and 1,400 in northern Hudson Bay. The numbers refer to animals at the surface and visible from a low-flying aircraft, with no adjustment for diving animals that would have been overlooked (Cetacean Specialist Group, 1996).

Germany:
Greenland: "Hay and Mansfield (1989) suggest from unpublished data, that in 1971 the Thule-district narwhal population in north-west Greenland was estimated ranging between 1,500 - 2,500. A more recent land-based count in 1984 (Born, 1994) showed the population in Inglefield Bay to number at least 4,000. In the Eurasian sector of the Arctic the only known estimate of narwhal numbers is from Scoreby Sound and Kung Oscar Fjord in eastern Greenland. A conservative figure of only 176 was obtained from an aerial line-transect survey carried out in September 1983 by F. Larsen (cited in Hay and Mansfield, 1989). Born (1994) confirms that more detailed data is lacking. He suggests that in this sector, narwhals prefer areas distant from the coast and may number at most a few thousand individuals" (Culik, 2003). The Scoresby Sund (east Greenland) population is estimated at 300 individuals. The numbers refer to animals at the surface and visible from a low-flying aircraft, with no adjustment for diving animals that would have been overlooked (Cetacean Specialist Group, 1996).
Iceland:
Netherlands:
Norway:
Russian Federation:
Svalbard and Jan Mayen:
United Kingdom:
United States:

Aquatic Regions: Arctic Sea, northeast Atlantic and northwest Atlantic.

“Narwhals are heavily exploited in the eastern Canadian Arctic and Greenland for their skin, meat, and tusks. The Narwhals in Davis Strait and Baffin Bay, as a “shared” stock, are subject to monitoring by the Canada-Greenland Joint Commission on Conservation and Management of Narwhal and Beluga. The responsibility for conservation rests with national agencies. At present, there is no official limit on the number of Narwhals that can be taken in either Canada or Greenland, nor are data on catch and hunting loss reported regularly to the IWC. Although the IWC Scientific Committee attempted to review the status of Narwhal and Beluga stocks in 1999, Canada and Greenland refrained from participating in the meeting. However, both countries participated fully in a review of these species by the Scientific Committee of the North Atlantic Marine Mammal Commission in the same year (NAMMCO, 2000)." (Cetacean Specialist Group, 1996).

The major threats to Narwhals are harvesting for food and materials for subsistence use as well as local and national trade (Cetacean Specialist Group, 1996).

"Neither of the countries hunting narwhals and exporting tusks (Greenland and Canada) sets hunting quotas, and the population estimate for the main population targeted (the Baffin Bay/Davis Strait stock) is based on survey data from 1979. For years, the International Whaling Commission (IWC), the Canada/Greenland Joint Commission on Conservation and Management of Narwhal and Beluga (JCNB), and the North Atlantic Marine Mammal Commission (NAMMCO) have warned of the risk of over-exploitation of narwhals and the need for new, comprehensive surveys" (Fisher, 2003).

"The CITES Animals Committee conducted a Review of Significant Trade in narwhal products in 1995. The review expressed some concerns about the species and, as a result, CITES made several Primary and Secondary Recommendations, including the need for new surveys. Although some small scale surveys and other studies have been done since 1995 (which add to the growing body of evidence that there are at least two populations in the Baffin Bay/ Davis Strait region), a comprehensive survey has still not been done" (Fisher, 2003).

"Incomplete and imprecise reporting of trade data make it difficult to assess the true extent of the trade, and its impact on the species. For example, Greenland has reported exports of over 100 'sets of carvings' without specifying the number of carvings in a set, and their size or weigh, these could be anything from small items of jewelry to carved whole tusks the distinction between teeth and tusks reported in trade data is still unclear. The original Significant Trade Review notes a comment that "reported trade in 'teeth' originating from Greenland, refers to what is commonly called 'tusks'". Noting that Greenland reported the export of 1950 teeth between 1992 and 2001, it would be significant if some or all of these were actually tusks" (Fisher, 2003).

"According to Strong (1988), Hay and Mansfield (1989) and IWC (2000), the most recent population surveys were carried out in 1984 and yielded 18,000 narwhals in the four major summering areas south of Lancaster Sound. A further 1,000 narwhals were estimated for the Repulse Bay - Frozen Strait area. Koski and Davis (cited in Born, 1994) recorded 34,000 narwhals in parts of Baffin Bay after the end of winter" (Culik, 2003).

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INTERNATIONAL TRADE

Gross Exports of *Monodon monoceros*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Canada	Bodies	0	0	0	0	0	0	0	0	0	3	0
Canada	Bones	0	0	1	0	0	0	0	0	0	0	0
Canada	Carvings	0	3	0	0	0	0	0	0	0	2	7
Canada	Horn	0	0	0	0	0	0	0	0	0	0	2
Canada	Ivory carvings	0	0	0	0	5	0	0	0	0	0	0
Canada	Ivory pieces	0	0	0	0	0	0	0	0	0	4	0
Canada	Live	0	0	0	0	0	0	0	0	0	6	0
Canada	Meat	0	0	0	0	0	0	0	0	0	1	0
Canada	Meat (kg)	0	0	0	0	0	0	0	0	0	30	0
Canada	Oil (flasks)	0	0	0	0	0	0	0	0	0	0	1
Canada	Plates	0	2	0	0	0	0	0	0	0	0	0
Canada	Skull	4	0	0	0	0	3	1	5	0	0	0
Canada	Teeth	0	4	0	0	0	0	0	4	0	4	0
Canada	Trophies	0	0	0	0	1	0	0	0	0	0	0

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Canada	Tusks	35	45	35	75	76	123	78	77	37	162	94
Canada	Tusks (kg)	0	0	0	0	0	0	0	20.92	0	0	0
Denmark	Live	0	0	0	1	0	0	0	0	0	0	0
Faroe Islands	Bones	0	0	0	0	0	0	0	0	0	0	1
Georgia	Carvings	0	10	0	0	0	0	0	0	0	0	0
Georgia	Teeth	0	42	0	0	0	0	0	0	0	0	0
Georgia	Tusks	0	8	0	0	0	0	0	0	0	0	0
Germany	Ivory carvings	0	0	0	1	0	0	0	0	0	0	0
Greenland	Bodies	0	0	0	0	0	1	0	0	0	0	0
Greenland	Bone carvings	0	0	0	0	0	0	0	0	0	1	0
Greenland	Bones	2	168	166	1	5	8	6	3	1	0	0
Greenland	Carvings	236	572	499	740	740	544	248	748	34	21	193
Greenland	Horn products (kg)	2	0	0	0	0	0	0	0	0	0	0
Greenland	Ivory carvings	0	0	0	0	0	0	3	0	0	0	0
Greenland	Ivory pieces	0	4	6	18	16	10	9	41	0	0	0
Greenland	Ivory scraps	46	1	0	0	0	0	0	0	0	0	0
Greenland	Meat	0	1052	2	0	0	1012	0	0	0	0	0
Greenland	Meat (kg)	0	0	353	387.5	1023.02	618.34	2558.38	0	0	0	636.6
Greenland	Skin	1	0	0	0	0	0	0	0	0	0	0
Greenland	Skin (kg)	0	0	0	0	0	0	0	0	0	8	0
Greenland	Skin pieces	0	158	208	0	0	0	0	0	0	0	0
Greenland	Skull	0	0	0	0	0	2	3	0	0	0	1
Greenland	Teeth	0	208	85	99	54	28	25	767	675	9	30
Greenland	Teeth (kg)	0	0	0	0	0	0	26	5	0	0	0
Greenland	Trophies	0	0	0	0	1	0	0	0	0	0	0
Greenland	Tusks	227	267	258	208	240	211	116	106	68	25	45
Norway	Tusks	0	0	0	0	0	0	0	0	0	0	1
United Kingdom	Bone carvings	0	0	0	1	0	0	0	0	0	0	0
United Kingdom	Tusks	0	0	0	0	2	0	0	0	0	2	1
United States	Skin	0	0	0	0	61	0	0	0	0	0	0

COMMENT

Levels of trade from Canada and Greenland appear to be stable. However, despite the Animals Committee's recommendation in 1995, a comprehensive survey has still not been done and the impact of current levels of trade on populations is uncertain. It is therefore recommended that this species should be reviewed.

4. Pseudalopex culpaeus

FAMILY **CANIDAE**

COMMON NAME(S) Andean Wolf (English); Colpeo Fox (English); Renard colfeo (French); Culpeo (Spanish); Zorro andino (Spanish)

GLOBAL CONSERVATION STATUS LR/lc (Canid Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Argentina: Occurrence reported (Cabrera, 1957). Overall estimates of abundance are not available, though Crespo (1975) noted that in general the species appeared to have maintained dense populations despite intensive persecution for many years. Crespo (1986) considers this species most abundant in the south of the country. Crespo and DeCarlo (1963) estimated a density of 0.72 foxes per sq. km (over an area of 18 sq. km) at their study site in southern Neuquen in the early 1960s. They noted that, on the basis of anecdotal information, the species appeared to have undergone a significant and sustained increase in density in the province around 1910-1915 when there was a change in land use from intensive horse-rearing and a small amount of cattle-rearing to sheep-grazing, this coinciding with a marked increase in abundance of the introduced European Hare which, along with sheep, has become the most abundant food item. To what extent this is paralleled elsewhere in the species's range is unclear. In 1981 it was described as rare and possibly in danger of extirpation

in Salta Province, northern Argentina (Mares *et al.*, 1981) and it is apparently scarce on Isla Grande of Tierra del Fuego, though has been so at least since the 1930s (Jaksic and Yanez, 1983; Osgood, 1943).

"Estimated numbers 60,000 individuals in Santa Cruz province, 200,000 for Patagonia and 30,000 for Chubut province (F.A.C.I.F., 1987). It is more numerous in the southern parts of Argentina, with a strong population of over 200,000 individual animals. In northern Argentina, however, the culpeo is almost nonexistent. They prefer to live in the pampas grasslands and deciduous forests of their range (Alderton, 1994).

In Patagonia, six years of data collected on population trends using scent line stations suggest that although there are annual cycles, the population of *Pseudalopex culpaeus* has remained essentially constant (Bellati pers. comm.)"(Ginsberg and Macdonald, 1990). Classified as Endangered by the Argentine Wildlife Board (Ginsberg and Macdonald, 1990).

Bolivia: Occurrence reported (Cabrera, 1957). Not individually protected, although a blanket ban on wildlife exports was in force until 1986 (Ginsberg and Macdonald, 1990).

Chile: Occurrence reported (Cabrera, 1957). Generally scarce. In Torres del Paine National Park (Magallanes) 45 individuals were sighted in a 424km strip census yielding a density of 1.3 individuals/km^2 (Ginsberg and Macdonald, 1990). Protected since 1980, although hunting for scientific purposes may be authorised by the bureau of Livestock and Agriculture (Ginsberg and Macdonald, 1990). Appears to be threatened, both from habitat loss and from illegal hunting, with pelts trans-shipped to Argentina (Ginsberg and Macdonald, 1990).

It has been stated as becoming generally scarce in Chile, though there is little detailed information (Fuentes and Jaksic, 1979). Osgood (1943) noted that *D. culpaeus* appeared to be relatively scarce in the extreme south, where it had been persistently pursued for the fur market, and was very scarce on Tierra del Fuego; it did however seem to be quite common in central Chile, while Greer (1965) stated it to be the most widespread canid in Malleco and Olrog (1950) described it as common on Isla Hoste in the Cabo de Hornos Archipelago. Pine *et al.* (1979) reported that the northern subspecies *D. c. andinus* did not appear to be abundant on the altiplano. `Generally scarce. In Torres del Paine National Park, Magallanes, 45 zorros were sighted in a 424 km strip census yielding a density of 1.3 individuals/km^2 (Rau pers. comm.; Abello 1979).' (Ginsberg and Macdonald 1990).

?**Colombia**: Distribution extends into Colombia (Honacki *et al.*, 1982; Alderton, 1994), and it is listed on Colombian legislation (Honacki *et al.*, 1982).

Ecuador: Occurrence reported (Cabrera, 1957).

Peru: Occurrence reported (Cabrera, 1957). "Abundant in the highlands of south Peru (de Macedo, pers.comm.; Grimwood 1969). Known on the eastern side of the Andes, and is abundant in the deserts (Grimwood, 1969), but does not descend into the coastal forest" (Ginsberg and Macdonald, 1990). Not protected (Ginsberg and Macdonald, 1990). Abundant throughout its range, despite heavy persecution; and not considered to be in need of protection at this time Grimwood (1969).

Extensively trapped and used for pelts (Ginsberg and Macdonald, 1990). It is hunted for its skins in Argentina and Bolivia, but this does not seem to be having an impact on their population (Alderton, 1994).

Consequences of changes in land use has been suggested to benefit *Pseudalopex griseus* to the detriment of *P. culpaeus*. Predation on lambs results in strong local pressure for predator control measures (Ginsberg and Macdonald, 1990).

The true situation concerning legal and illegal trade combined is far from clear. Considering only CITES recorded trade, IUCN concluded in 1988 that international trade is currently not a significant threat to the species, and that its present level does not have a deleterious effect on the Argentine population. Cattan (pers. comm.) however considers illegal hunting to be undoubtedly the most important threat to the species. Strict enforcement of wildlife legislation in most Latin American countries is unlikely to occur in the near future. Domestic enforcement of legislation is minimal (Ginsberg and Macdonald 1990).

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INTERNATIONAL TRADE

Gross Exports of *Pseudalopex culpaeus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Argentina	Garments	80	6	6	0	350	0	0	0	36	16	73
Argentina	Garments (skins)	0	0	0	0	0	70	0	126	0	0	1962
Argentina	Plates	0	0	0	0	0	0	0	0	0	0	2
Argentina	Plates (kg)	0	0	0	0	0	0	0	0	0	232	0
Argentina	Skin pieces	73	0	0	30	0	0	0	0	0	0	0
Argentina	Skin pieces (kg)	43.7	0	0	0	0	0	2.25	0	0	0	184.2
Argentina	Skin pieces (skins)	0	0	0	0	0	0	166	1	0	0	0
Argentina	Skins	54	0	13	16	3982	613	6703	73	521	7218	19009
Argentina	Skins (kg)	0	0	0	0	500	0	2250	0	0	0	0
Argentina	Tails	5	0	0	0	0	0	0	0	0	0	0
Chile	Skins	0	0	0	0	0	0	0	0	0	0	1

COMMENT
Argentina is the main exporter and exports have been increasing with relatively high levels in 2002. No recent population estimates seem to be available, and this species is considered endangered in Argentina, therefore recommended for review.

5. Pseudalopex griseus

FAMILY **CANIDAE**

COMMON NAME(S) Argentine Grey Fox (English); Renard de Chiloé (French); Renard gris d'Argentine (French); Chilla; Zorro chico (Spanish); Zorro de la Isla Chiloe (Spanish); Zorro gris argentino (Spanish)

GLOBAL CONSERVATION STATUS LR/lc (Canid Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

The Argentine gray fox is wide spread throughout Patagonia and western Argentina. Tierra del Fuego is now the area with the highest population density. These foxes are also found on several small islands off the western coast of West Falkland, in Chile, southern Peru, and are believed to exist in central Peru. They live on both sides of the Andes Mountains (23° S to 55° S) (Knop, 2003).

Argentina: Occurrence reported (Bertonatti and Gonzalez, 1992). Introduced to Tierra del Fuego in 1951 to control the European rabbit. Widespread throughout Patagonia form the Straits of Magellan to Chubut province and northwards, apparently in a relatively narrow strip in the lowlands of western Argentina. On the Malvinas/Falkland Islands, it is found on several small islands off the west coast of west Falkland (Ginsberg and Macdonald, 1990). Classified as Endangered by the Argentine Wildlife Board (Ginsberg and Macdonald, 1990).
Chile: Introduced to Tierra del Fuego. Widespread from the Straits of Magellan northewards as far as the southern half of the II Administrative region, mainly in lowlands and foothills of coastal mountain ranges. (Ginsberg and Macdonald, 1990). In Rio Nego, Patagonia, population levels have been stable since 1983, in spite of heavy harvesting for furs. Deep snowfall can depress population levels, but recovery is usually speedy (Knop, 2003).

Ginsberg and Macdonald (1990) consider doubful the population estimates of 37,250 to 65,837 provided by Duran *et al.* (1985). Ginsberg and Macdonald (1990) note that the study was funded by a Magallanes' hunters association, and that it resulted in the ban on hunting of grey zorro being lifted and hunting licences being issued. Hunting later became uneconomical (due to scarcity) after a very small proportion of estimated populations were removed, suggesting an overestimate of standing densities. It is protected by law but enforcement is lax (Ginsberg and Macdonald, 1990).

Falkland Islands: Found on several small islands off the west coast of west Falkland (Ginsberg and Macdonald, 1990).
Peru: Occurrence reported (Ginsberg and Macdonald, 1990).

No hunting or skin trade has been permitted since 1929 in some areas, although fox skins are still exported through Chile via Argentina. Hunting is banned year-round in some areas. (The World Conservation Union, 1998).

Both hunting, legal and illegal, and the presence of *Pseudalopex culpaeus* may limit the gray fox's distribution, even though their territories do not overlap (Knop, 2003). Consequences of changes in land use has been suggested to benefit *Pseudalopex griseus* to the detriment of *P. culpaeus*. Predation on lambs results in strong local pressure for predator control measures (Ginsberg and Macdonald, 1990). Local people believe that these foxes prey upon sheep and domestic fowl, although scat analysis indicates that such predation is probably not common (Nowak, 1999).

Ginsberg and Macdonal (1990) note that better estimates of population densities and absolute population numbers in both Chile and Argentina are urgently required and that although trade in this species has declined somewhat in recent years, levels of harvesting are still very high. They also note that confusion and disagreements concerning previous surveys suggest that surveys should be made by parties without an economic interest in the species.

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INTERNATIONAL TRADE

Gross Exports of *Pseudalopex griseus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Argentina	Bones	0	4	0	0	0	0	0	0	0	0	0
Argentina	Feet	0	0	0	0	0	0	0	0	1510	0	0
Argentina	Garments	2684	3271	2844	1015	4775	173	342	0	387	148	387
Argentina	Garments (kg)	0	0	149	88	324.5	172.6	0	34	0	0	0
Argentina	Garments (skins)	0	0	0	0	0	22628	0	2661	0	0	6324
Argentina	Hair (kg)	0	0	0	0	0	0	0	0	0	40	0
Argentina	Plates	51	32504	95	0	0	56	21	78	897	60	62
Argentina	Plates (kg)	0	0	0	0	0	0	0	0	2525.95	889.65	160.25
Argentina	Plates (skins)	0	0	0	0	0	0	0	0	0	0	168
Argentina	Skins	22975	8500	15020	4016	79603	22202	42334	20362	23150	39368	124803
Argentina	Skins (kg)	150	0	0	0	657	62	356.6	92.2	1170.45	22.5	303.25
Argentina	Skin pieces	2290	4542	1000	2928	6400	30	0	0	903	1	448
Argentina	Skin pieces (kg)	2130.9	0	70	178	200	839.5	624.85	335.7	32	80.3	1241.93
Argentina	Skin pieces (skins)	0	0	0	0	0	2568	128	2167	0	0	0
Argentina	Tails	191	2	0	0	0	0	0	20	0	0	100
Argentina	Tails (kg)	0	0	0	0	0	0	60	0.4	0	0	1.5
Argentina	Trophies	0	0	0	0	0	1	1	3	0	4	1
Chile	Skins	0	0	0	0	0	0	0	0	0	3831	1230

COMMENT

There are no recent population estimates in any range state. Although it is said to be widespread in Argentina, the main exporter of this species, it is classified as endangered. Given the high levels of recent trade from Argentina and an apparent increase in trade in 2002 the species is recommended for review.

6. Vulpes zerda

FAMILY **CANIDAE**

COMMON NAME(S) Fennec Fox (English); Fennec (French); Fennec (Spanish); Zorro del Sahara (Spanish)

GLOBAL CONSERVATION STATUS DD (Canid Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Occurs in the deserts of North Africa, throughout the Sahara. Scant information available due to nocturnal habit. One sighting was made in the Sinai in the late 1970s. No recent sightings have been made there (Ginsberg and Macdonald, 1990).

Algeria: Occurrence reported (Rosevear, 1974).
? Burkina Faso: Occurrence reported (Roure, 1968).
Chad: Occurrence reported (Newby, 1970).
Egypt: Occurrence reported (Osborn and Helmy, 1980).
Iraq:
Israel:
Kuwait: Occurrence reported (Harrison, 1968).
Libyan Arab Jamahiriya: Occurrence reported (Rosevear, 1974).
Mali: Occurrence reported (Ginsberg and Macdonald, 1990).
Mauritania: Occurrence reported (Ginsberg and Macdonald, 1990).
Morocco: Occurrence reported (Cabrera, 1932).
Niger: Occurrence reported (Newby, 1982).
Oman:
Saudi Arabia: Occurrence reported (Ginsberg and Macdonald, 1990).
Sudan: Occurrence reported (Ginsberg and Macdonald, 1990).
Tunisia: Occurrence reported (Rosevear, 1974).
Western Sahara: Occurrence reported (Valverde, 1957).

Trapped and sold as pets and extensively hunted for pelts by indigenous people in the Sahara. Does not breed well in captivity. No known threats other than potential over-exploitation. Given its habitat requirements, it is unlikely that the species will be in any danger of extinction in the near future (Ginsberg and Macdonald, 1990). Fennecs are rare (Anon., 2004) and although they do no harm to human interests, they are intensively hunted by the native people of the Sahara. The Fennec has become rare in some parts of northwestern Africa (Grzimek, 1975).

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INTERNATIONAL TRADE

Gross Exports of *Vulpes zerda*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Egypt	Bodies	0	0	3	0	0	0	0	0	0	0	0
United Arab Emirates	Live	0	0	0	0	0	20	0	0	0	0	0
Egypt	Live	10	0	502	554	60	0	10	19	0	0	0

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Mali	Live	0	0	0	0	10	0	0	0	0	0	0
Sudan	Live	0	0	138	4	5	10	12	95	0	40	43
Chad	Trophies	0	0	0	0	0	0	0	0	0	2	0

COMMENT
Sudan has been the only country exporting this species recently. Fennecs are rare and being intensively hunted. Given the lack of information on the status in any range state the species is recommended for review.

7. Ursus arctos

FAMILY **URSIDAE**

COMMON NAME(S) Brown Bear (English); Grizzly Bear (English); Grizzly (French); Ours brun (French); Oso pardo (Spanish)

GLOBAL CONSERVATION STATUS LR/lc (Bear Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Brown bears are distributed throughout Eurasia with a large 'mainland' population in tundra and taiga forests of Russia extending into neighbouring areas of the D.P.R. of Korea, Mongolia, and China (Servheen, 1990).

CITES Appendix I range states: Bhutan, China, Mexico, Mongolia

CITES Appendix II range states:
Afghanistan: unknown (Servheen, 1999).
Albania: Populations of uncertain size are also found in Albania (Servheen, 1990). Many of these populations are likely to go extinct in the near future unless they are carefully managed (Craighead, 2001).
Armenia:
Austria (ex): Population very small and threatened (Servheen *et al.,* 1999). At present, there are just a few brown bears living in Austria, but the situation is promising and bear numbers
are rising. Today in Austria the brown bear occurs in two small populations. Three to six individuals are assumed to live in southwestern Carinthia, representing an outpost of the southern Slovenian population expanding into the border area with Austria and Italy. The second population is located in the Limestone Alps of Styria and Lower Austria and comprises 8–10 individuals; it is the result of a reintroduction project started by WWF-Austria in 1989. In addition to these populations, the Alps of Styria and Carinthia and to a lesser extent also of Salzburg and Upper Austria, are visited by migrating individuals with increasing frequency. A third center of bear distribution is emerging in northwestern Styria and the bordering areas of Upper Austria (Rauer, 1999).
Azerbaijan:
Belarus:
Belgium (ex):
Bosnia and Herzegovina: decreasing (Servheen *et al.*, 1999).
Bulgaria: The Bulgarian micro-population inhabits the Rila-Rhodopes Mountain Massif (including the smaller mountains north of Rila), and numbers some 500 specimens. Rare in Bulgaria and potentially threatened, owing to the limited population number and distribution that results from human pressure. At the same time, numbers have slowly increased in the last fifty years (Spassov and Spiridonov, 1999).
Canada: Stable? (Servheen *et al.,* 1999). Population c. 25,000, in western Canada. Threatened or extirpated in some areas of relatively dense human rural and urban settlement, while over much of their range populations remain healthy. (ref?) The grizzly bear in Canada exists throughout the western part of the country from the coast to the prairie of Alberta and north to the Arctic Ocean. Total population estimates are of 53,280-66480. The grizzly is considered a game animal in Canada and is protected by the game laws of each province or territory. Concern about the population in Alberta exists (Horejsi, 1989) and the population of British Columbia, though large, has been eliminated from some areas in the southern part of their range by human activities (Servheen, 1989).
The harvest of grizzly bears in British Columbia can be managed on a sustainable basis, with minimal risk of population declines. One important improvement in the current system would be to incorporate the effects of uncertainty in population parameters when calculating quota allocations. The Panel's evaluation of grizzly bear harvest did not reveal any compelling evidence of over-harvest in the province as a whole or in any GBPUs [grizzly bear population units]. Nevertheless, the Panel cannot conclude that over-harvest is not occurring. Small sample sizes precluded any meaningful analysis at the MU [management unit] level. The current scale of allowable harvest (3% to 6% per year) has been derived from population models that did not include sampling error as a distinct source of uncertainty in parameter

values. We recommend that the upper end of the current scale be reduced by 1% (i.e. from 6% to 5%) to ensure that it captures the full extent of uncertainty (Anon., 2003).
Croatia: About 400 bears in Croatia (Berkhoudt, 1999) and the population is considered to be stable (Berkhoudt, 1999; Swenson *et al*., 2000). Monitoring is said to take place. However, no information is provided on how it is carried out and organized (Berkhoudt, 1999).
Czech Republic: Very small population and threatened (Servheen, 1999).
Denmark:
Estonia: Stable (Servheen, 1999).
Finland: There are about 450 brown bears in Finland contiguous with Russia (Pullainen, 1989).
France: Very small, endangered (Servheen, 1999). About 20 to 30 brown bears are found in smaller subpopulations in the Pyrenees Mountains between France and Spain (Camarra and Parde, 1992).
Georgia:
Germany (ex):
Greece: Very small, threatened (Servheen, 1999). Brown bears total about 90 to 170 in two populations in Greece (Mertzanis, 1989).
Hungary:
India: Small**,** threatened (Servheen, 1999).
Iran (Islamic Republic of): Small? (Servheen, 1999).
Iraq:
Israel (ex):
Italy: Two populations are found in Italy, one of 50 and one of 10 to 16 animals (Zunino, 1992; Boscagli, 1987). About three brown bears are known in the Brenta Mountains of Italy bordering Switzerland. These bears are seldom observed and were censused by DNA analysis of hair and scat samples (Kohn *et al.*, 1995a; Kohn *et al.*, 1995b).
Japan: Hokkaido may have received no immigrants since the last, Wisconsin, glaciation. Historically, Hokkaido may have supported as many brown bears as Sakhalin in a 77,000 km^2 area. Up to 3,000 bears have been reported in recent times (Domico, 1988), but Servheen considered the population size as unknown in 1989. The population is much reduced from historic levels and it appears to be fragmented into three subpopulations (Servheen, 1990) that are separated from each other by human development.
Jordan (ex):
Kazakhstan: The populations is estimated at 1800 (Servheen, 1994).
Korea, DPR:
Kyrgyzstan:
Latvia: Very small, threatened (Servheen, 1999).
Lebanon (ex):
Liechtenstein (ex):
Lithuania (ex):
Macedonia (former Yugoslav Republic of): The former Yugoslavia was estimated to support 1600 to 2000 brown bears in 1989 (Isakovic, 1970; Huber, 1992), but the recent war has reduced bear numbers and further fragmented the habitat (Huber, 1994).
Netherlands (ex):
Norway: Approximately 700 brown bears were estimated in Sweden and Norway in 1994 (Swenson, 1994).
Pakistan: Very small, endangered (Servheen, 1999).
Poland : There are many small, isolated populations and 70 to 75 individuals in Poland (Jakubiec and Buchalczyck, 1987).
Portugal (ex):
Romania: Large numbers but decreasing (Servheen, 1999). Romania has the largest brown bear population in Europe outside the Soviet Union with an estimated 6,000 bears in the Carpathian Mountains and the Transylvanian Alps in an area of 34,000 km^2 or 52% of the wooded area of Romania. This population has increased from less than 1,000 animals in 1950 to its present size; and more than 4,000 km^2 has been reoccupied by bears in the past 20 years. The density of this population is approximately 1 bear/6 km^2 on average with certain areas having a density of 1 bear/1.25 km^2 (Servheen, 1989). A population of 6,000 is estimated in southwestern Russia\Romania (Rosler, 1989).
Russian Federation: Increasing in the European part? (Servheen, 1999). Stable to decreasing in the Central/Eastern part (Servheen, 1999). `The population of *Ursus arctos* of the area comprising the Soviet Union may be as high as 100 000, representing more than 50% of the extant global population of the species (Servheen, 1990). This population had been estimated to number around 100,000 individuals in the 1960s; by the 1970s, however, this number had decreased to around 70,000. By the 1970's, the Kamchatka population had been greatly reduced due to over-hunting. In the Kronotsky State Reserve, in the 1940's numbers were estimated to be several thousands, but by 1970 the numbers did not exceed several hundreds. Populations are thought to be stable throughout the country except for *U. a. leuconyx* (= *U. a. isabellinus*) and *U. a syriacus* (Ovsyanikov, 1988).

In the eastern portion of the geographical area comprising the Soviet Union, population estimates based on wildlife counting efforts of the Soviet Hunting Department (Glavokhota) were: 8 850 in West Siberia; 40 000 in East Siberia; 32 000 in the far eastern section of the country; 1 400 in Sakhalin; and 700 in the Kuril Islands (Vereschchagin, 1978). For

the far eastern USSR, Dunishenko (1987) estimated 12-14 000 individuals in Kamchatka; 1 900-2 000 in Sakhalin; 5 000-5 500 in Khabarovsk; 2 000 in Primorye; 1 700 in Amurskaya; and 2 000 in Magadanskaya. Pazshetnov (1989 in Brautigam, 1989) believes populations of the species in the far east could be threatened with extinction due to hunting.

In Russia, since the decline of communism, there has been a tremendous increase in hunting by overseas clients and poaching by local residents. The game management and enforcement infrastructure collapsed, and has been slow to rebuild (Craighead, 2001).

A population of 6,000 is estimated in southwestern Russia\Romania (Rosler, 1989). Europe has one large contiguous brown bear population in northwestern Russia and Finland. Servheen (1990) reports estimates of 30,000 to 33,000 west of the Ural Mountains. This total includes 4000 in central regions, 4000 in the Ural Mountains, 5000 in the Volga-Vyatka region, 1000 in the Carpathian Mountains, 3000 in the Caucasus Mountains, and 16,000 in northwestern regions. Since the fall of Communism this northwestern population has begun to reconnect with smaller populations of 700 in Sweden and Norway (Swenson, 1994). There are about 450 brown bears in Finland contiguous with Russia (Pullainen, 1989).
Sakhalin Island has an estimated population of 1,400 brown bears (Servheen, 1990). It is less than 10 km from the mainland of the Russian Far East at the closest point and migrant individuals are probably exchanged occasionally.

The Russian Kamchatka Peninsula is estimated to support 12,000 to 14,000 brown bears (Dunishenko, 1987) but these populations are rapidly being decimated except in protected areas. Between Hokkaido and Kamchatka, the Kurile Islands form a stepping stone array of smaller intermediate islands. The larger of the Kurile Islands adjacent to either of these 'mainlands' have resident bear populations. These larger islands are separated from each other and from the 'mainlands' by about 25 km. A total of 700 brown bears are estimated on the larger Kurile Islands (Dunishenko, 1987). The smaller islands in the center of the chain do not support resident bear populations.
Serbia and Montenegro:
Slovakia: Increasing (Servheen, 1999).
Slovenia: Stable (Servheen, 1999).
Spain: Very small, threatened (Servheen, 1999). Two populations are found in Spain, of 93 to 103 individuals and of 17 individuals (Clevenger *et. al.*, 1987), and about 20 to 30 brown bears are found in smaller subpopulations in the Pyrenees Mountains between France and Spain (Camarra and Parde, 1992).
Sweden: Increasing (Servheen, 1999). Sweden has actively managed to protect and increase their brown bear population after a period during which they were almost extirpated. Approximately 700 brown bears were estimated in Sweden and Norway in 1994 (Swenson, 1994). Sweden contains the densest brown bear population in Europe and it is located in areas with the highest road densities known for brown bear habitat. Presently there may be close to 1000 brown bears, most of these bears reside in Sweden (Craighead, 2001), but they are begining to expand into Norway where they are more likely to come into conflict with sheep herding practices (sheep roam freely in Norway) (Swenson *et al.* 1995).
Switzerland (ex):
Syrian Arab Republic (ex):
Tajikistan: Unknown (Servheen, 1999).
Turkey: The forests in Turkey have been diminishing in size, as in the rest of Europe, and the human population is increasing. This has led to the rapid decrease of the bear (*Ursus arctos*) population over the last 30 to 40 years in Turkey. In comparison to the past, although there is a decline in the bear populations in Turkey, the situation seems quite good in the following areas: Artvin and its vicinity, Hakkari and its vicinity, the Cilo and Sat mountains, and the region between Tunceli and Erzincan where the Munzur mountains are located. These regions, which are far away from human beings, have quite a good population of bears. Although the population in the rich forests of the Black Sea region is less dense, relict groups have not yet been formed. The inhabitants of the localities south west of Artvin i.e. Yusufeli province and its vicinity, have repeatedly complained of the harm done to their livestock and their orchards by bears. As a result, since 1982, the General Directory of Forestry has had to permit bear hunting from August to April, but only by foreign hunters. Experienced guides from the villages in the vicinity are assigned to these tourists and the high fees paid to them have encouraged the protection of the species. The decision of whether to allow the hunting of bears rests on an evaluation of the number of bears hunted and the stock of live bears (Mursasoglu, 1989).
Turkmenistan:
Ukraine: Decreasing (Servheen, 1999).
United Kingdom (ex):
United States: The Alaskan population is stable, still occurring throughout its historic range. The brown bear has been extirpated from the remainder of its range in the western USA due to intolerant attitudes. Legal protection, wildlife management, and the existence of large reserves of public lands in Alaska appear adequate to assure the survival of the species in Alaska through the 21st century. Most hunting is for trophies but a small and under-documented proportion of the kill is for susbistence use by residents in rural villages. Although sale of bear parts is illegal in Alaska, the increasing value of these parts in overseas markets has doubtless resulted in an increased number of illegal kills (Servheen, 1999). A few hundred animals occur in the lower 48 United States, protected under Federal Law, with killing not permitted except in self-defense (Servheen *et al.*, 1999).

In the United States the estimated total population is less than 700-900 animals in the six subpopulations. The grizzly bear is listed as a threatened species and is subject to protection and management under the U.S. Endangered Species Act. Unauthorized killing is illegal and federal agencies are required to assure that management actions on federal lands will not adversely affect the species. Illegal killing of grizzly bears in the United States outside of Alaska is punishable by federal fines of up to $20,000 and five years in prison and/or state imposed fines (Servheen, 1990).

Uzbekistan:
The total Alps-Dinaric-Pindos population is estimated to consist of about 2800 bears (Berkhoudt, 1999).

Throughout the world, three major factors drive the loss or decline of bear populations: human-induced mortality, habitat loss, and habitat fragmentation (Servheen *et al.*, 1999). Main sources of mortality are poaching, hunting and traffic kills. Poaching is regarded to be a
threat, hunting to be a possible threat (Berkhoudt, 1999; Swenson *et al.*, 2000). Because of grizzly bears' low reproductive rate and low density, extraordinary caution must be exercised in harvesting them (Anon., 2003).

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INTERNATIONAL TRADE

Gross Exports of *Ursus arctos*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Angola	live	0	0	1	0	0	0	0	0	0	0	0
Argentina	live	0	0	3	0	0	0	0	0	0	0	0
Armenia	skins	0	0	0	0	0	0	0	1	0	0	0
Australia	trophies	0	0	0	0	0	0	0	0	0	1	0
Azerbaijan	trophies	0	0	0	0	0	0	0	0	1	0	0
Belgium	live	0	8	0	0	0	0	0	0	0	0	0
Brazil	live	0	3	0	0	0	0	0	0	0	0	0
Bulgaria	skins	3	4	1	0	0	2	1	1	1	0	0
Bulgaria	skulls	0	0	0	0	0	2	1	1	0	0	0
Bulgaria	trophies	2	0	11	5	1	5	10	7	4	5	2
Cambodia	derivatives (kg)	0	0	0	0	20	0	0	0	0	0	0
Canada	bodies	14	17	19	33	30	40	26	45	4	27	23
Canada	bones	18	5	1	4	15	8	1	1	0	5	2
Canada	gall bladders	1	0	0	0	41	0	0	0	0	0	0
Canada	hair	0	0	0	0	41	0	203	209	0	740	0
Canada	live	1	2	2	4	0	0	0	0	0	0	0
Canada	meat (kg)	31.82	13.63	0	18.18	3.2	46.45	1	93.1	0	0	56
Canada	plates	5	9	12	5	11	17	20	26	32	43	21
Canada	skins	280	258	233	221	304	299	276	262	69	194	236
Canada	skulls	168	164	175	175	186	225	157	155	53	136	166
Canada	trophies	143	145	131	147	172	148	116	190	131	110	112
China	derivatives	0	0	0	2	0	0	0	0	0	0	0
Croatia	skins	0	0	0	0	0	0	0	0	0	0	4
Croatia	skulls	0	0	0	0	0	0	0	0	0	0	4
Croatia	trophies	0	0	0	0	2	0	0	2	7	4	12
Czech Republic	live	0	0	0	0	0	5	0	0	0	0	0
Czech Republic	skulls	0	0	0	0	0	0	0	0	5	0	0
Czech Republic	trophies	0	0	0	0	0	0	0	0	2	0	0
Estonia	bodies	0	0	0	0	0	20	1	3	1	0	1
Estonia	live	0	0	2	0	0	0	5	0	0	0	0
Estonia	meat	0	0	0	25	0	0	1	0	1	0	0
Estonia	meat (kg)	0	0	0	1052	1067	0	250	0	0	0	0
Estonia	skins	0	1	19	0	4	2	5	6	3	2	1
Estonia	skulls	0	0	1	0	1	9	3	5	11	1	0
Estonia	trophies	0	0	8	14	23	11	16	23	18	3	12
Finland	bodies	0	0	2	1	0	0	1	0	0	0	0
Finland	skins	0	0	0	1	0	0	1	0	1	0	0
Finland	trophies	7	0	0	0	2	0	1	0	0	2	0
Georgia	skins	0	0	3	2	0	0	0	0	0	0	0
Georgia	trophies	0	0	16	1	0	0	0	0	0	0	0
Germany	skins	0	0	0	0	0	0	0	0	1	0	0
Greece	bones	0	0	0	0	0	0	0	0	0	0	2
Greenland	skins	0	1	0	0	0	0	0	0	0	0	0
Guatemala	live	8	0	0	0	0	0	0	0	0	0	0
Hungary	live	0	0	1	1	0	0	0	0	0	0	0
Hungary	skins	1	0	0	0	0	0	0	0	0	0	0
Kazakhstan	live	0	0	0	0	0	0	0	0	0	2	0

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Kazakhstan	trophies	0	0	0	0	0	0	0	0	0	1	0
Latvia	live	0	0	0	0	0	0	0	0	0	0	1
Lithuania	skulls	0	0	0	0	0	0	0	0	3	0	0
Mexico	live	0	0	0	0	0	0	2	0	0	0	0
Mongolia	trophies	0	0	0	0	1	0	0	0	0	1	0
Norway	bodies	0	0	0	0	0	1	0	0	0	0	0
Norway	live	0	1	0	0	1	0	0	0	0	0	0
Poland	live	0	0	0	0	0	0	0	0	1	0	0
Romania	bodies	0	0	63	0	0	0	0	0	2	0	0
Romania	meat (kg)	0	0	0	0	4076	3538	0	0	0	0	0
Romania	skins	0	1	1	24	11	28	75	21	29	5	16
Romania	skulls	0	0	0	21	7	26	75	20	30	5	16
Romania	trophies	0	1	47	20	12	25	128	90	152	109	110
Russian Federation	bodies	0	1	0	0	3	0	1	5	12	4	0
Russian Federation	bones	0	0	0	0	0	0	0	1	0	1	0
Russian Federation	gall (kg)	0	0	15	15	63.245	30.777	3.855	5.307	12	11.737	0
Russian Federation	gall bladders (kg)	0	0	0	0	11	18.094	0	2.995	0	9.83	0
Russian Federation	live	133	148	25	7	39	43	49	23	20	25	0
Russian Federation	meat	0	0	0	0	0	0	0	0	2	0	0
Russian Federation	meat (kg)	0	0	0	0	0	2000	150	1300	900	0	0
Russian Federation	plates	0	6	0	0	1	0	3	0	0	1	0
Russian Federation	skins	13	101	157	40	166	46	55	64	66	49	41
Russian Federation	skulls	0	15	17	18	29	33	40	33	37	39	32
Russian Federation	trophies	271	582	390	284	303	314	335	446	513	590	268
former Yugoslavia	live	0	2	0	0	0	0	0	0	0	0	0
Slovak Republic	bodies	0	1	0	0	1	0	0	1	0	1	0
Slovak Republic	live	2	0	2	2	0	0	0	0	1	0	1
Slovak Republic	meat (kg)	0	700	0	0	0	0	0	0	0	0	0
Slovak Republic	skins	4	6	7	1	0	15	0	2	3	4	0
Slovak Republic	skulls	0	0	0	0	0	0	0	0	1	0	0
Slovak Republic	trophies	0	0	4	0	11	1	10	3	4	1	9
Slovenia	bodies	0	0	0	0	0	0	0	20	0	0	2
Slovenia	live	0	1	0	0	0	2	0	2	3	2	3
Slovenia	skins	0	1	0	0	0	0	0	0	0	0	1
Slovenia	skulls	0	1	0	0	0	0	0	0	0	0	1
Slovenia	trophies	0	0	0	0	0	0	0	1	0	0	0
former Soviet Union	live	7	0	0	0	0	0	0	0	0	0	0
former Soviet Union	plates	1	0	0	0	0	0	0	0	0	0	0
former Soviet Union	skins	34	0	0	0	0	0	0	0	0	0	0
former Soviet Union	skulls	1	0	0	0	0	0	0	0	0	0	0
former Soviet Union	trophies	73	0	0	0	0	0	0	0	0	0	0

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Spain	bones	0	0	0	0	8	0	0	0	0	0	0
Sweden	bodies	0	1	1	0	1	1	0	2	1	1	0
Sweden	live	0	1	0	0	0	0	0	0	0	0	0
Sweden	meat (kg)	0	0	0	0	0	0	0	0	0	0	81.7
Sweden	skins	0	5	1	0	1	1	0	1	1	0	0
Sweden	trophies	1	0	0	1	1	4	0	0	0	2	0
Turkey	live	0	0	3	0	0	0	0	0	0	0	0
Turkey	skins	0	0	0	0	1	0	0	0	0	0	0
Turkey	trophies	0	2	3	2	2	1	2	0	0	0	0
Ukraine	skulls	0	0	0	0	0	0	0	0	2	0	0
United Kingdom	skins	0	0	0	0	0	0	1	0	0	0	0
United States	bodies	1	0	1	0	108	4	3	2	4	10	2
United States	bones	0	0	0	0	0	0	0	0	0	1	33
United States	live	1	0	6	0	1	1	2	0	0	6	0
United States	meat (kg)	0	0	0	0	0	0	0	15	0	0	0
United States	plates	19	9	3	6	11	10	8	8	6	10	4
United States	skins	168	37	19	29	26	21	34	29	32	33	6
United States	skulls	9	12	7	5	15	16	25	17	7	23	6
United States	trophies	72	92	68	87	98	89	109	86	93	86	85
Uzbekistan	live	0	0	0	0	0	0	6	4	0	3	0
former Czechoslovakia	live	3	2	0	0	0	0	0	0	0	0	0
Former Czechoslovakia	trophies	1	0	0	0	0	0	0	0	0	0	0

Export Quotas for *Ursus arctos* for years 1997-2002 as submitted to the CITES Secretariat

Country	Term	1997	1998	1999	2000	2001	2002
Romania	carcases / meat (kg)				20000	20000	
Romania	hunting trophies	150	150	150	150	150	200
Romania	live	5	2				
Turkey	hunting trophies			10	10		
Uzbekistan	live						3

COMMENT

Not recommended for review. Romanian exports have remained below the quota, as have exports from Turkey and Uzbekistan. Levels of trade from Canada, Romania and the Russian Federation do not appear too high given the population size in these countries.

8. Ursus maritimus

FAMILY **URSIDAE**

COMMON NAME(S) Polar Bear (English); Ours blanc (French); Ours polaire (French); Oso polar (Spanish)

GLOBAL CONSERVATION STATUS LR/cd (Polar Bear Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

The world population estimate in 2001 was 21,500-25,000 individuals, in 20 relatively discrete populations (Lunn *et al.*, 2002). The polar bear is the only bear, and probably one of the only large carnivores, that still occurs throughout most of its original range (Lunn *et al.*, 2002). The population trend is considered stable (Polar Bear Specialist Group, 1996).

Canada: Occurrence reported (Hall, 1981). 15,000 or more individuals occur in Canada. 14 of the 19 currently recognised populations are in or shared by Canada (Polar Bear Specialist Group, 2001). It is estimated that there are 230 individualsin the Viscount Melville Sound and that the population is stable. It is estimated that there are 100 individuals in the Norway Bay, and that the population is stationary, being managed with a flexible quota system in which any over-harvest in a one year results in a fully compensatory reduction to the following year's quota (Polar Bear Specialist Group, 2001).
Greenland: Occurrence reported (Hall, 1981). An estimate of 2,000 individuals but this estimate is not thought to be very reliable (Polar Bear Specialist Group, 2001).
Iceland: Occurrence reported (Polar Bear Specialist Group, 1996).
Japan: Occurrence reported (Polar Bear Specialist Group, 1996).
Norway: Occurrence reported (Polar Bear Specialist Group, 1996). It is estimated that there are 100 individuals in the Norway Bay, and that the population is stationary, being managed with a flexible quota system in which any over-harvest in a one year results in a fully compensatory reduction to the following year's quota.

Russian Federation: Occurrence reported (Mittchell-Jones *et al.,* 1999). It is estimated that there are 800-1200 individuals in the Laptev Sea (Polar Bear Specialist Group, 1996).

Svalbard and Jan Mayen: Occurrence reported (Mittchell-Jones *et al.,* 1999).
United States: Occurrence reported (Hall, 1981).

It is estimated that there are 2,000-5,000 individuals in the Barents Sea, over 2,000 in the Chukchi Sea (thought to be a stable population, although this is not certain), 1,800 in the southern Beaufort Sea (increasing populations) , 1,200 in the northern Beaufort Sea (increasing populations), 200 in Queen Elizabeth (thought to be a stable population, although this is not certain) (Polar Bear Specialist Group, 1996).

In the early 1960s, concern was expressed about the increasing harvest of polar bears. In 1965, when little management was in effect except for the USSR, where polar bear hunting was banned in 1956, an international meeting was convened which agreed upon protection actions throughout the animal's range. The *Agreement on the Conservation of Polar Bear and Their Habitat*, which came into effect in 1976 arose from this meeting. The primary goal of the agreement is to limit hunting to sustainable levels. To date, although not enforceable by law in any of the countries that have signed it, this agreement has been the most important single influence on the development of internationally coordinated management and research programs, which have ensured the survival of polar bars (Lunn *et al.*, 2002).

Serveen *et al.* (1999) provide comprehensive information on the status and conservation needs and measures facing the polar bear, including comments on compliance with the polar bear agreement. They note that both historically and currently the main threat to polar bears is over-harvesting.

The polar bear is particularly susceptible to the effects of climate change, paticularly changes in sea-ice which is known to alter polar bear numbers and productivity(Lunn *et al.*, 2002). The extent to which human activities, such as shipping, seismic exploration, drilling, hard mineral mining offshore or onshore, transport of oil, and ecotourism might affect polar bear habitat is not known. Also, contamination of ice, water, food species and bears themselves by oil and other toxins may increas as human activites in the Arctic increase (Serveen *et al*., 1999). The effect of persistent organic pollutants on polar bears are only partially understood, but levels of such pollutants are already sufficiently high that they are considered to pose a potential risk to reproduction (Lunn *et al.*, 2002).

Specific conservation recommendations in Serveen *et al.* (1999) include urging all signatory governments to the convention to comply fully with the agreement as well as prioritising research and management action for populations where current management practices appear to be causing numbers to decline.

Harvesting of polar bears remains of great importance to the culture and economy of aboriginal groups through much of the Arctic (Polar Bear Specialist Group, 2001).

Polar bears are legally hunted throughout most of their range today. They are not considered rare or endangered at present by the Convention on International Trade in Endangered Species (CITES). Hunting quotas are enforced by law in Alaska, and by agreement in parts of Canada. There are no legal limits for eskimos in Quebec, Greenland, and Alaska. Hunting is prohibited in Russia and the Svalbard Archipelago, but enforcement is difficult. In Russia especially, the current economic conditions have encouraged poaching and the extent of it is unknown. An international Agreement on the Conservation of Polar Bears was signed in 1973 by Canada, Denmark, Norway, the United States, and the former USSR which regulates hunting and guides the management of polar bear populations. The use of set guns and hunting from ships and aircraft are prohibited (Craighead, 2001).

Overharvesting and illegal killing are considered to be the greatest threat to polar bear populations today. However, human activities are becoming more of a threat as oil and gas development in particular begins to encroach on the

Arctic. Human developments displace polar bears from important habitat, create conflicts that result in bear deaths, create disturbance and stress that affects their behavior and survival, and can introduce toxic substances that impact polar bears and their prey in direct and indirect ways (Craighead, 2001).

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INTERNATIONAL TRADE

Gross Exports of *Ursus maritimus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Canada	bodies	6	11	5	19	11	26	23	50	7	40	34
Canada	bones	2	4	1	1	3	8	7	21	1	27	35
Canada	gall	0	1	0	0	0	0	0	0	0	0	0
Canada	gall bladders	0	2	13	0	0	0	0	0	0	0	0
Canada	live	0	1	1	2	2	2	0	0	0	0	0
Canada	plates	1	142	93	110	43	3	53	0	1	1	1
Canada	skin pieces	20	740	2	6	0	18	2	20	6	0	2
Canada	skin pieces (kg)	0	0	0	0	0	0	8.7	59	0	0	0
Canada	skins	176	230	161	199	294	430	293	295	37	131	175
Canada	skulls	18	29	14	28	17	96	62	126	14	106	96
Canada	teeth	0	0	0	0	0	5	4	3	0	3	9
Canada	trophies	22	22	21	19	20	104	82	136	87	82	85
Canada	tusks	0	0	0	0	0	0	0	2	0	0	0
Greenland	bones	0	16	0	0	1	1	0	0	1	0	0
Greenland	meat	0	0	0	0	0	1	0	0	0	0	0
Greenland	meat (kg)	0	0	0	0	0	0.5	0	0	0	0	0
Greenland	skin pieces	13	0	11	12	16	42	19	17	0	1	2
Greenland	skins	81	109	62	70	45	64	69	157	56	46	57
Greenland	skulls	21	36	24	18	25	45	34	13	9	7	3
Greenland	teeth	9	8	1	22	8	0	1	5	2	0	5
Greenland	trophies	13	0	5	5	5	1	0	1	0	0	1
Greenland	tusks	0	0	0	0	0	0	1	0	0	0	0
Norway	bodies	0	0	0	0	1	1	0	0	0	0	0
Norway	skins	0	0	0	0	0	1	1	0	0	2	0
Norway	teeth	0	26	0	42	0	158	0	48	96	100	320
Norway	trophies	0	0	0	0	0	0	1	0	0	0	0
Romania	trophies	0	0	0	0	0	0	2	0	0	0	0
Russian Fed.	bodies	0	1	0	0	0	0	0	0	0	0	0
Russian Fed.	live	1	0	2	0	0	7	0	1	0	12	0
Russian Fed.	teeth	0	0	27	20	0	0	0	0	0	0	0
United States	bodies	0	1	0	1	0	0	1	0	0	0	0
United States	bones	0	0	0	0	0	0	1	0	0	0	0
United States	live	2	0	0	0	0	1	0	0	0	0	0
United States	plates	0	0	0	0	0	0	1	0	0	0	0
United States	skin pieces	0	0	0	0	0	313	0	0	0	2	1
United States	skin pieces (kg)	0	0	0	2	0	0	0	0	0	0	0
United States	skins	0	0	0	0	0	0	1	0	0	0	0

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
United States	teeth	56	3	39	0	0	0	0	104	0	126	74
United States	trophies	1	1	0	0	0	2	1	0	0	0	0

COMMENTS
Not recommended for review.This species is considered globally to be low risk. Canada is exporting similar quantities every year, but population sizes in Canada appear large and stable.

9. Conepatus humboldtii

FAMILY **MUSTELIDAE**

COMMON NAME(S) Humboldt's Hog-nosed Skunk (English); Patagonian Hog-nosed Skunk (English); Moufette à nez de cochon (French); Moufette de Patagonie (French); Anas (Spanish); Chingue de la Patagonia (Spanish); Mofeta de Patagonia (Spanish)

GLOBAL CONSERVATION STATUS LR/lc (Mustelid Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

A largely Patagonian species, found at low altitudes in southern Chile and Argentina. Taxonomy of the genus *Conepatus* is the subject of controversy and the limits of the range depend on the classification adopted. Little recent information on status is available and the species has recently been variously described as `scarce' or `locally common (Broad *et al.*, 1988). Globally, it is considered 'apparently secure' (uncommon but not rare; some cause for long-term concern due to declines or other factors) (NatureServe, 2003).

Argentina: `Olrog and Lucero (1980) state that it is locally common. Noted as possibly scarce, but there was no concrete recent information' (Broad *et al.*, 1988). Some indication that the numbers of *C. humboldtii* have decreased (Broad *et al.*, 1988), but T. Waller (*in litt.* to TSG, 1991) considers the species to be abundant. The numbers killed each year in Patagonia are not known but unpublished data show that population levels have been stable from 1989 to 1993 (A. Novaro and M. Funes *in litt.* to TSG, 1993).' (Anon., 1993)
Chile: In 1978 it was reported to have become scarce, as a result of intensive hunting for its pelt (Anon., 1978); Osgood (1943) found it to be fairly numerous.' (Broad *et al.*, 1988). The species is `now, as *C. chinga humboldti* [sic] categorized as Out of Danger in the Red List of Chilean vertebrates (Glade, 1988).' (Anon. 1993).
?Paraguay: Occurrence reported (Honacki *et al.*, 1982).

Considerable numbers of skins appear to have been exported from Argentina up to 1983, although most available figures relate to *Conepatus* species in general, with around 155,000 per year in the 1970s; the proportion of these being *C. humboldtii* is unknown. According to CITES data, the declared number of skins of *C. humboldtii* exported from Argentina in 1983 and 1984 was far lower (2,000-3,000) than that for 1982 (c. 44,000), coinciding with the instigation of legal protection for the species; there should theoretically have been no export of skins after 1983 (Broad *et al.*, 1988).

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INTERNATIONAL TRADE

Gross Exports of *Conepatus humboldtii* from Argentina

Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Garments	23	18	56	1	5	0	0	0	0	0	0
Garments (skins)	0	0	0	0	0	0	0	2550	0	0	0
Plates	0	0	0	0	0	0	0	69	0	0	0
Skins	0	0	150	0	3320	24	900	1550	10348	1980	1
Skins (kg)	0	0	0	0	0	0	0	0	0	37.5	0
Skin pieces (kg)	1.35	0	0	0	0	0	0	0	0	0	0

COMMENT
Conflicting information regarding status in Argentina but globally this species is not considered to be threatened. Traded in high numbers as skins but not possible to determine whether these levels are sustainable. Recommended for review because of uncertainty over population status in Argentina.

10. Caracal caracal

FAMILY **FELIDAE**

COMMON NAME(S) African Caracal (English); Asian Caracal (English); Caracal English); Caracal (French); Lynx du désert (French); Caracal (Spanish); Lince africano (Spanish)

GLOBAL CONSERVATION STATUS LC (Cat Specialist Group, 2001)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Widely distributed across North Africa, Central Asia, and south-west Asia. While it is relatively common, there is concern over the status of populations on the edge of its range in the Central Asian republics and in Pakistan. Found in the drier habitats, including savannah and woodland, as well as desert, and absent only from the tropical rainforest. Caracals take a variety of prey, including relatively large prey such as gazelles, and they are known for their exceptional ability to catch birds (Nowell and Jackson, 1996).

Appendix I Range States:
Afghanistan, India, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakhstan, Kuwait, Lebanon, Oman, Pakistan, Saudi Arabia, Syrian Arab Republic, Tajikistan, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Yemen

Appendix II Range States:
Algeria, Angola, Benin, Botswana, ? Burkina Faso, Cameroon, Central African Republic, Chad, ? Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Gabon, Gambia, Ghana, ? Guinea, Guinea-Bissau, Kenya, ? Lesotho, ? Liberia, Libyan Arab Jamahiriya, Malawi, ? Mali, Mauritania, Morocco, Mozambique, Namibia, Niger, Nigeria, Senegal, Somalia, South Africa, Sudan, ? Swaziland, Tanzania, United Republic of, ? Togo, ? Tunisia, Uganda, Zambia, Zimbabwe

The status of the caracal is satisfactory in sub-Saharan Africa. It appears to be most abundant in South Africa and Namibia, where its range is expanding (Stuart and Wilson, 1988; Rowe-Rowe, 1992) possibly linked to local extirpation of black-backed jackals by farmers (Pringle and Pringle, 1979; Stuart, 1982, H. Berry *in litt.* 1991). In the savannah regions of west and central Africa, it is less common and patchily distributed in pockets of drier habitat (Kingdon, 1977).

It is not protected over most of its sub-Saharan range and has no legal protection in Egypt. Hunting of the species is prohibited in Algeria, India, Iran, Israel, Kazakhstan, Morocco, Pakistan, Tajikistan, Tunisia, Turkey, Turkmenistan, and Uzbekistan. In Sub-Saharan Africa, the caracal is protected from hunting in about half of its range states; in Namibia and South Africa, it is classified as a Problem Animal. It is capable of taking small domestic livestock, and records from South Africa show large numbers of caracals trapped by farmers each year. Hunting for skins and "luxury bushmeat" is reported to be a threat in west and central Africa, where it is more sparsely distributed (Nowell and Jackson,1996).

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INTERNATIONAL TRADE

Gross Exports of *Caracal caracal*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Angola	live	0	0	2	0	0	0	0	0	0	0	0
Argentina	trophies	0	4	0	0	0	0	0	0	0	0	0
Australia	trophies	0	0	0	0	0	0	1	0	0	0	0
Central African Republic	trophies	0	0	1	0	0	0	0	0	0	0	0
Ethiopia	skins	2	0	0	0	0	0	1	0	0	0	0
Ethiopia	skulls	0	0	0	0	0	0	1	0	0	0	0
Ethiopia	trophies	0	9	1	0	0	0	0	1	0	2	0
Namibia	bodies	4	0	0	0	7	2	1	0	0	1	1
Namibia	bones	0	0	0	0	0	0	0	0	1	1	0
Namibia	live	3	0	0	0	1	2	0	0	0	0	0
Namibia	skin pieces	0	0	0	0	0	0	18	0	0	0	0
Namibia	skins	211	497	55	48	75	14	98	30	57	18	8
Namibia	skulls	1	1	1	6	2	2	16	7	7	5	5
Namibia	teeth	0	0	0	1	0	0	0	0	0	0	0
Namibia	trophies	22	29	15	50	11	15	60	30	25	50	52
South Africa	bodies	2	1	5	3	0	2	2	5	2	3	1
South Africa	bones	0	0	0	0	0	0	0	0	0	1	0
South Africa	claws	0	0	0	0	0	0	0	0	0	0	4
South Africa	feet	0	0	0	0	0	0	0	0	8	8	0
South Africa	live	10	10	41	32	13	10	5	6	4	10	13
South Africa	plates	1	0	0	0	0	0	0	0	0	1	0
South Africa	skeletons	0	0	0	0	0	0	0	0	0	0	5
South Africa	skin pieces	0	0	0	0	0	0	2	0	0	0	1
South Africa	skins	53	2	3	5	8	12	94	78	48	89	117
South Africa	skulls	27	19	11	25	13	2	86	103	43	78	59
South Africa	teeth	0	0	0	0	0	0	0	2	0	0	0
South Africa	trophies	36	41	61	42	44	114	117	123	232	227	419
South Africa	trophies (kg)	0	0	0	0	0	0	0	0	0	1	0
Tanzania	skulls	1	0	0	0	0	0	0	0	0	0	0
Tanzania	trophies	0	1	0	0	1	0	0	1	0	1	2
Zambia	skins	0	0	0	0	0	1	0	0	0	0	0
Zambia	skulls	0	0	0	0	0	1	0	0	0	0	0
Zambia	trophies	0	0	1	2	0	0	0	0	0	0	0
Zimbabwe	bodies	0	0	0	0	0	0	0	0	4	0	0
Zimbabwe	feet	0	0	0	0	0	4	0	0	0	0	0
Zimbabwe	plates	0	10	0	0	0	0	0	0	1	0	0
Zimbabwe	skins	2	1	2	6	2	4	6	5	9	2	0
Zimbabwe	skulls	1	0	2	11	1	3	5	3	11	3	0
Zimbabwe	trophies	7	7	4	10	7	9	12	12	15	15	9

Export Quotas for *Caracal caracal* for years 1997-2002 as submitted to the CITES Secretariat

Country	Term	1997	1998	1999	2000	2001	2002
Ethiopia	Skins						10
Ethiopia	Trophies					10	10
Mozambique	live	10	10	10	10	10	10

COMMENT
Not recommended for review. South Africa and Namibia are the main exporters but these are the countries in which the Caracal is most abundant, with an expanding range. Moreover, Caracals are classified as problem animals in these countries. Ethiopia and Mozambique are not exceeding their quotas.

11. Panthera leo

FAMILY **FELIDAE**

COMMON NAME(S) Africa Lion (English); Lion d'Afrique (French); León (Spanish)

GLOBAL CONSERVATION STATUS VU C2a(i) (Cat Specialist Group, 2001)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

The lion formerly ranged from northern Africa through south-west Asia (where it disappeared from most countries within the last 150 years), west into Europe, where it apparently became extinct almost 2,000 years ago, and east into India (where a relict population survives today in the Gir Forest (Nowell and Jackson, 1996).

Optimal habitat appears to be open woodlands, and thick bush, scrub and grass complexes, where sufficient cover is provided for hunting and denning. The lion has a broad habitat tolerance, absent only from tropical rainforest and the interior of the Sahara desert (Nowell and Jackson 1996). Medium- to large-sized ungulates (including antelopes, zebra, and wildebeest) are the bulk of their prey, but lions will take almost any animal, from a rodent to a rhino. They also scavenge, pushing other predators (such as the spotted hyaena) off their kills (Nowell and Jackson, 1996).

CITES Appendix I population (*Panther leo persica)*:
Greece (ex), India, Iran (Islamic Republic of) (ex), Iraq (ex), Israel (ex), Pakistan (ex), Syrian Arab Republic (ex)

CITES Appendix II populations (*Panther leo)*:
Algeria (ex), Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti (ex), Egypt (ex), Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, ? Guinea-Bissau, Kenya, Lesotho, Malawi, Mali, ? Mauritania (ex), Morocco (ex), Mozambique, Namibia, Niger, Nigeria, ? Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, United Republic of, Togo, Tunisia (ex), Uganda, Western Sahara (ex), Zambia, Zimbabwe

Based on estimates of density and geographic range, the lion's total effective population size is estimated at below 10,000 mature breeding individuals, with a declining population due to habitat and prey base loss and persecution, and with no subpopulation containing more than 1,000 mature breeding individuals. East and Southern Africa are home to the majority of the continent's lions; in West Africa, numbers have greatly declined. Throughout most of Africa, lions are becoming increasingly rare outside protected areas (Nowell and Jackson, 1996).

Lions are generally considered serious problem animals whose existence is at odds with human settlement and cattle culture. Many people are killed each year in Africa by lions. Their scavenging behaviour makes them particularly vulnerable to poisoned carcasses put out to eliminate predators (Nowell and Jackson, 1996). The main threat is currently persecution for pest control (Cat Specialist Group, 2001).

Hunting is banned in Angola, Cameroon, Congo, Gabon, Ghana, Malawi, Mauritania, Niger, Nigeria, and Rwanda. Hunting is restricted to "problem" animals in Benin, Botswana, Burkina Faso, Central African Republic, Ethiopia, Ivory Coast, Kenya, Mali, Mozambique, Senegal, Somalia, Sudan, Tanzania, Togo, Uganda, Zaïre, Zambia and Zimbabwe (Nowell and Jackson, 1996).

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INTERNATIONAL TRADE

Gross Exports of *Panthera leo*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Angola	live	0	0	4	0	0	0	0	0	0	0	0
Benin	skins	0	0	0	0	0	0	0	1	0	0	0
Benin	trophies	0	0	3	4	4	10	3	3	4	1	0
Botswana	bodies	1	0	4	0	1	0	0	0	0	0	0
Botswana	live	0	0	0	0	0	0	0	0	0	4	0
Botswana	plates	6	0	0	0	2	0	0	0	0	0	0
Botswana	skins	8	19	33	94	234	102	64	94	72	0	0
Botswana	skulls	6	56	12	1	2	0	3	2	2	0	0
Botswana	trophies	145	151	49	34	9	18	9	22	30	9	2
Burkina Faso	skins	0	0	0	0	2	0	0	0	0	0	0
Burkina Faso	skulls	0	0	0	0	2	0	0	0	0	0	0
Burkina Faso	trophies	8	3	3	6	5	7	12	12	20	10	2
Central African Republic	skins	0	0	0	1	1	0	0	0	0	0	0
Central African Republic	skulls	0	0	0	1	1	0	0	0	0	0	0
Central African Republic	trophies	23	8	9	9	6	6	3	10	12	5	0
Cameroon	skins	0	0	2	0	0	0	0	1	0	0	0
Cameroon	skulls	0	0	2	0	0	0	0	1	0	0	0
Cameroon	trophies	26	7	5	10	14	12	9	16	20	6	9
Chad	trophies	0	0	0	0	0	1	1	0	1	8	3
Congo, Democratic Republic of	trophies	0	0	0	0	0	0	1	0	1	0	0
Cote d'Ivoire	skins	0	0	0	0	0	0	0	0	0	1	0
Cote d'Ivoire	trophies	2	0	0	0	0	0	0	0	0	0	0
Egypt	live	0	0	0	4	0	0	0	0	0	0	0
Ethiopia	live	0	0	0	2	0	0	0	0	0	0	0
Ethiopia	skins	2	12	0	4	2	0	2	0	0	0	2
Ethiopia	trophies	1	6	13	1	0	0	1	3	0	2	2
Gabon	skins	1	0	0	0	0	0	0	0	0	0	0
Gabon	trophies	0	0	0	0	0	0	0	0	0	0	2
Kenya	derivatives	1	0	0	0	0	0	0	0	0	0	0
Kenya	live	3	0	0	0	0	0	0	1	0	0	0
Kenya	skin pieces	0	0	0	0	0	0	0	0	2	0	0
Kenya	skins	0	3	0	0	0	0	0	1	1	0	1
Kenya	skulls	1	0	2	0	0	0	0	0	0	0	0
Kenya	trophies	2	1	1	0	1	1	1	1	0	1	0
Malawi	live	0	0	0	6	0	0	0	0	0	0	0
Malawi	skins	0	3	5	2	1	0	0	0	0	0	0
Malawi	trophies	0	0	4	0	0	0	0	0	0	0	0
Malaysia	live	8	4	0	0	0	0	0	0	0	0	0
Mozambique	skins	0	0	0	0	1	0	2	21	7	13	0
Mozambique	skulls	0	0	0	0	0	0	2	20	9	13	0
Mozambique	trophies	0	0	11	5	17	14	21	1	29	15	11

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Namibia	bodies	2	0	0	2	0	0	0	0	0	0	0
Namibia	live	0	33	0	13	21	3	2	0	0	0	0
Namibia	skins	7	6	6	8	21	18	11	9	7	1	2
Namibia	skulls	5	0	2	1	1	1	4	2	4	2	1
Namibia	trophies	30	19	22	23	7	8	10	7	11	11	6
Niger	live	0	0	0	0	0	6	0	0	0	0	0
Senegal	skins	1	0	0	0	0	0	0	0	0	0	0
Senegal	trophies	1	0	0	0	0	0	0	0	0	0	0
South Africa	bodies	21	2	5	13	1	9	4	2	3	2	3
South Africa	bones	1	0	0	0	1	0	3	0	2	0	0
South Africa	live	10	7	7	2	0	8	2	17	0	0	18
South Africa	plates	2	3	2	1	4	1	4	8	13	4	15
South Africa	skin pieces	0	0	0	0	1	0	0	0	0	1	0
South Africa	skins	26	37	34	82	32	84	71	60	85	55	32
South Africa	skulls	18	18	34	14	15	18	91	93	83	69	33
South Africa	trophies	168	137	192	105	102	108	110	107	146	134	147
Sudan	skins	2	0	0	0	0	0	0	0	0	0	0
Tanzania	bodies	0	0	0	0	1	0	0	0	0	0	0
Tanzania	live	0	0	1	0	0	0	2	1	0	0	0
Tanzania	skin pieces	0	0	0	2	0	3	1	0	0	0	0
Tanzania	skins	3	25	26	34	47	35	50	32	25	13	6
Tanzania	skulls	1	9	15	33	42	35	49	35	20	10	6
Tanzania	trophies	202	195	282	230	298	276	264	272	316	230	226
Togo	trophies	0	0	0	0	0	0	0	0	0	1	0
Zambia	bodies	0	0	0	1	0	0	0	0	0	0	0
Zambia	live	0	0	0	0	2	0	0	0	0	0	0
Zambia	skins	9	6	17	19	24	8	15	11	9	4	0
Zambia	skulls	3	0	11	14	25	6	13	9	9	2	0
Zambia	trophies	118	36	51	65	50	45	82	74	47	24	3
Zimbabwe	bodies	0	0	1	1	2	1	2	0	15	0	1
Zimbabwe	bones	0	36	0	6	0	2	0	0	4	0	0
Zimbabwe	live	0	0	6	0	0	2	0	11	3	0	25
Zimbabwe	plates	0	2	1	1	2	2	0	9	0	0	2
Zimbabwe	skin pieces	0	2	42	4	0	0	0	2	0	1	0
Zimbabwe	skins	13	24	37	82	35	20	31	24	68	20	7
Zimbabwe	skulls	13	33	46	104	27	19	43	24	73	16	5
Zimbabwe	trophies	246	189	102	123	100	93	81	123	91	95	104

Export Quotas for *Panthera leo* for years 1997-2002 as submitted to the CITES Secretariat

Country	Term	1997	1998	1999	2000	2001	2002
Ethiopia	Live and trophies				10	15	
Ethiopia	Trophies						30

COMMENT

Not recommended for review. South Africa, Tanzania and Zimbabwe are the main exporters for this species and show relatively high but stable levels of trade over time. These are the countries in which the lion is most abundant. Ethiopia is not exceeding its quotas.

12. Prionailurus bengalensis

FAMILY **FELIDAE**

COMMON NAME(S) Bengal Leopard Cat (English); Leopard Cat (English); Chat de Chine (French); Chat-léopard du Bengale (French); Gato bengalí (Spanish); Gato de Bengala (Spanish)

GLOBAL CONSERVATION STATUS LC (Cat Specialist Group, 2001)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Has a wide distribution Asia, ranging up to 3,000m in parts of its range, which extends into the Himalayas along river valleys. It occurs in a broad spectrum of habitats, from tropical rainforest to temperate broadleaf and, marginally, coniferous forest, as well as shrub forest and successional grasslands. The northern boundaries of its range are limited by snow cover; the leopard cat avoids areas where snow is more than 10cm deep. It is not found in the cold steppe grasslands, and generally does not occur in arid zones, although there are a few records from relatively dry and treeless areas in Pakistan (Nowell and Jackson 1996).

Leopard cats occur commonly in dense secondary growth, including logged areas, and have been found in agricultural and forest (rubber tree, oil palm) plantations. The species can live close to rural settlements, occasionally raiding poultry, and have recently been reported from the outskirts of Beijing, where they were thought to have disappeared years ago. They are excellent swimmers, and have successfully colonized offshore islands throughout their range (Nowell and Jackson 1996).

Appendix I populations:

Bangladesh: Occurrence reported (Sarker and Sarker, 1984).
India: Occurrence reported (Biswa *et al.*, 1986).
Thailand: Occurrence reported (Chasen, 1935).

Appendix II populations:

Afghanistan: Occurrence reported (Anon., 1981).
Bhutan: Occurrence reported (Chakraborty, 1976).
Brunei:
Cambodia:
China: Occurrence reported (Lu, 1990). In China, the center of its range, commercial exploitation has been heavy, especially in the south-west. Hundreds of thousands of Leopard Cat skins per year were exported until Europe stopped imports in the late 1980's over concern for the species status (Nowell and Jackson 1996).
Hong Kong: Occurrence reported (Marshall, 1967).
Indonesia: Occurs in Bali, Java, Kalimantan and Sumatra (Robinson and Kloss, 1917).
Japan: On Tsushima islands *Prionailurus bengalensis* (including *Prionailurus bengalensis iriomotensis*) was estimated to number less than 100 individuals, down from perhaps 200-300 individuals in the 1960s-1970s (Izawa, 1990; Cat Survival Trust, 2003). There is debate among cat specialists about whether the Iriomote cat, found only on the small Japanese island of Iriomote off the eastern coast of Taiwan, is a unique species (as suggested by morphology) or an isolated subspecies of Leopard Cat (as suggested by genetic analysis). As a species, the Iriomote cat would qualify as Critically Endangered and the world's most threatened cat, with a single population of less than 100 animals (Nowell and Jackson 1996). Populations of Tsushima cats are protected (Cat Survival Trust, 2003). Island populations are seriously threatened (Nowell and Jackson 1996).
D.P.R. Korea: Occurrence reported (Won, 1976).
Korea Republic: Occurrence reported (Won, 1976).
Lao P.D.R.: Occurrence reported (Gressitt, 1970).
Macao:
Malaysia: Occurs in Peninsular Malaysia, Sabah and Sarawak (Medway, 1969).
Myanmar: Occurrence reported (Corbet and Hill, 1992).
Nepal: Occurrence reported (Mitchell, 1975).
Pakistan: Occurrence reported (Nawaz, 1983).
Philippines: Perhaps extirpated from Cebu (Nowell and Jackson, 1996). Island populations are seriously threatened (Nowell and Jackson 1996).
Russian Federation: Occurrence reported (Bannikov and Sokolov, 1984). Concern about their status in the Russian Far East (Nowell and Jackson, 1996).
Singapore: Occurrence reported (Harrison, 1966).
Taiwan: Uncommon (Nowell and Jackson, 1996).

Viet Nam: Occurrence reported (Dào van Tiên, 1978).

Leopard cats are common (relative to other felids) across much of their range. Island populations are the most vulnerable. Leopard cats can hybridize with domestic cats and hybridization in the wild has been reported (Nowell and Jackson 1996). Skins of spotted cats are always in demand for clothing (Cat Survival Trust, 2003).

The leopard cat is protected at the national level over part of its range, with hunting prohibited in Bangladesh, Cambodia, Hong Kong, India, Indonesia, Japan, Malaysia (except Sabah), Myanmar, Nepal, Pakistan, Philippines, Russia, Thailand and Taiwan, and hunting and trade regulations in place in South Korea, Laos and Singapore (Nowell and Jackson 1996).

Insufficient information exists about the numbers of leopard cats in the wild to really assess their status. Although subspecies may be threatened, the species is sufficiently widespread to withstand a lot of human encroachment (Cat Survival Trust, 2003).

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INTERNATIONAL TRADE

Gross Exports of *Prionailurus bengalensis* including the subspecies *chinensis*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
China	bodies	0	0	0	2	0	0	0	0	0	0	0
China	garments	0	0	0	0	0	5	4	0	14	39	123
China	plates	12506	0	0	10	4956	23095	9180	7671	16560	21855	24283
China	plates (m2)	0	0	0	0	0	0	200	0	0	0	0
China	skin pieces	0	0	0	0	0	0	0	0	400	2798	0
China	skins	8211	0	0	0	4700	20499	16000	28793	66415	24459	24696
Japan	garments	0	0	0	0	0	0	0	1	0	0	0
Laos	bodies	0	1	0	0	0	0	0	0	0	0	0
Malaysia	bodies	1	0	0	0	0	0	0	0	1	0	0
Malaysia	live	4	3	0	2	0	0	0	6	0	0	0
Myanmar	live	0	0	0	0	0	0	0	0	0	0	2
Russian Federation	live	0	2	0	0	0	0	0	0	0	0	0
Taiwan	bodies	0	1	0	0	0	0	0	0	0	0	0
Thailand	skins	1	0	0	0	0	0	0	0	0	0	0
Viet Nam	bodies	1	9	9	1	1	0	0	2	0	0	0
Viet Nam	trophies	0	0	0	0	0	0	0	0	0	0	2

COMMENT
Recommended for review. China is the main exporter with very high levels of trade. Although China is the centre of the leopard cat's range, no information on national status is available so given the high levels of trade the species is recommended for review

13. Arctocephalus pusillus

FAMILY **OTARIIDAE**

COMMON NAME(S) Afro-Australian Fur Seal (English); Cape Fur Seal (English); Arctocéphale d'Afrique du Sud (French)

GLOBAL CONSERVATION STATUS LR/lc (Seal Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS
Two subspecies: South African or Cape fur seal (*Arctocephalus pusillus pusillus*) and Australian fur seal (*A. pusillus doriferus*). The Australian fur seal population is believed to be derived from the South African fur seal population (Seal Conservation Society, 2001).

South African fur seal: The South African fur seal is found along the coast of Namibia and the west and south coasts of South Africa. Breeding colonies stretch from Cape Frio in Namibia, close to the Angolan border, to Black Rocks, near Port Elizabeth in South Africa. The population size is estimated to be 1.5-2 million, about two thirds of which are in Namibia (Seal Conservation Society, 2001).

Australian fur seal: Breeding colonies for the Australian fur seal are restricted to nine islands in Victoria and Tasmania, all in the Bass Strait, and there is a total population estimate of 30,000-50,000. The largest colony is at Seal Rocks in Victoria. The non-breeding range of the Australian fur seal extends from Kangaroo Island in South Australia to Tasmania and Port Macquarie in New South Wales (Seal Conservation Society, 2001).

Aquatic distribution: Southeast Atlantic, eastern Indian Ocean and southwest Pacific.

Angola: Occurrence reported (Skinner and Smithers, 1990).
Australia: Occurrence reported (Pearse, 1979). It is estimated that 200,000 Australian fur seals were killed for their fur in the 18th - 19th centuries. Restricted sealing continued in Tasmanian waters until as recently as 1970, but the fur seals are now protected by state law in both Victoria and Tasmania and, since 1975, by national legislation. Conflicts with fisheries still pose a great threat however, and there are concerns that these will increase as the population recovers. Australian fur seals are attracted to fish in static and, less commonly, trawl fishing nets and many are drowned in nets and traps or shot by fishermen and fish farmers. Fishermen in Victoria also claim that fur seals are drastically reducing commercial fish stocks but this is not substantiated by scientific evidence. Increased disturbance and increased pollution of Australian fur seal habitat with pesticides and heavy metals are additional threats to the population (Seal Conservation Society, 2001).

In October 2000, it was revealed that, despite their protected status, the Tasmanian government is to allow the killing of Australian fur seals that are deemed to be a hazard to fish farms and commercial fishermen (Seal Conservation Society, 2001).
Gabon: Occurrence reported (Thibault, 1999).
Mozambique: Occurrence reported (Smithers *et al.*, 1976).
Namibia: Occurrence reported (Skinner and Smithers, 1990). An annual commercial hunt of South African fur seals takes place in Namibia. The hunt quota for the 2000 season was set at 60,000 pups and 7,000 adult males, almost double that of the 1999 quota of 30,000 pups and 5,000 adult males. The number of hunt concession holders for the 2000 season was also doubled from two to four. The Namibian government has claimed that the increased hunt is needed to protect fisheries, a claim countered by environmental groups who point out that no scientific evidence has been shown to indicate that an increased seal hunt would actually benefit Namibian fisheries. (Seal Conservation Society, 2001).

According to the Seal Conservation Society (2001) there are plans to build a factory complex at Henties Bay which will act as an abattoir, bone meal plant, fat processing plant, tannery, shoe factory, leatherware factory, canning factory, research laboratory, museum and retail sales outlet. It is believed that the sale of seal genitalia for the aphrodisiac trade in the Far East is the most lucrative part of the industry (Seal Conservation Society, 2001).

An estimated 150,000 new born pups, virtually all of the pups born, unexpectedly died each year on the Namibian coast in 1994 and 1995. Tens of thousands of adult fur seals also died during these two years. This mortality was almost certainly due to malnutrition and starvation because of a scarcity of fish caused by environmental conditions (Seal Conservation Society, 2001).
South Africa: Occurrence reported (Skinner and Smithers, 1990). Commercial killing of South African fur seals has continued in some form since the early 1600s and more than 2.7 million South African fur seals have been killed since 1900, mostly in Namibia. In the 1980s the demand for the bulls' genitals by the Far Eastern aphrodisiac trade meant that

only the genitals of many of the killed seals were taken. An unknown, but relatively small, number of fur seals are victims of marine pollution (Seal Conservation Society, 2001).

Fur seals in South Africa have been protected since 1893, the most recent legislation being the Sea Birds and Seals Protection Act of 1973 which affords complete protection but allows the government to grant permits to kill fur seals at specific colonies. Between 1973 and 1982 there were an average of 18,750 pups and 530 adult males killed per year, and from 1983 until the suspension the average was 3,500 pups and 4,300 adult males, although these figures were highly variable between years. The hunt in South Africa has been suspended since 1990 by Government decree. A small number of subadult male fur seals were culled around the island of Malgas in March 1999 and again in February 2000 in order to protect Cape gannet fledglings on the island from seal predation (Seal Conservation Society, 2001).

There are numerous interactions between South African fur seals and line, trawl and purse-seine fisheries. Seals are accused of taking fish from the nets and lines or chasing the fish away. Many seals drown in the fishery nets and discarded fishing gear, or get caught in fishing boat propellers. Fishermen also claim that culling South African fur seals will increase fish stocks. Mathematical modelling studies have shown however that this is not necessarily the case due to the complexity of the marine food web, and that a seal cull might actually cause a reduction, for example, in the commercial catch of hake (Seal Conservation Society, 2001).

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INTERNATIONAL TRADE

Gross Exports of *Arctocephalus pusillus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Namibia	bodies	0	0	0	0	1	0	0	0	0	0	0
Namibia	gall bladders (kg)	0	0	0	0	0	0	0	0	197	0	0
Namibia	live	30	14	10	0	0	11	45	0	0	1	0
Namibia	meat	0	0	0	0	0	0	0	0	50	0	0
Namibia	oil (flasks)	0	0	0	0	0	0	0	0	0	0	12
Namibia	oil (kg)	0	0	0	0	0	0	0	0	30000	0	0
Namibia	oil (l)	0	0	0	0	0	0	0	0	0	0	3420
Namibia	skin pieces	0	460	0	0	0	0	0	0	102	0	8
Namibia	skins	13141	43478	43547	37019	42611	29950	5860	2124	48686	20654	117409
Namibia	skulls	0	0	0	0	2	0	0	0	0	100	1
Namibia	trophies	0	0	5	2	0	3	1	0	0	4	1
South Africa	bodies	0	0	2	0	0	0	0	0	0	0	0
South Africa	live	13	13	10	3	8	7	3	24	12	65	12
South Africa	skins	6000	0	0	0	5500	0	0	0	50	409	0
South Africa	skulls	0	0	0	0	1	0	0	0	0	0	0

COMMENT

Recommended for review. Namibia is the main exporter, with relatively stable levels of trade over time but a relatively large and sudden increase in 2002. Although Namibia's population is large, a review is recommended to determine sustainability of the trade.

14. Equus zebra hartmannae

FAMILY **EQUIDAE**

COMMON NAME(S) Hartmann's Mountain Zebra (English); Zèbre de Hartmann (French); Zèbre de montagne de Hartmann (French); Cebra de Hartmann (Spanish)

GLOBAL CONSERVATION STATUS EN A1b (status for *E.zebra)* (Equid Specialist Group, 1996)

DISTRIBUTION AND LOCAL CONSERVATION STATUS

Historically, mountain zebras ranged from the southern parts of South Africa through Namibia into the extreme south west of Angola (Moehlman, 2002).

Angola: Occurrence reported (Hill and Carter, 1941; Moehlman, 2002).
Namibia: Occurrence reported (Joubert, 1973; Moehlman, 2002). It still occurs throughout its range at low densities. The Namibian population is relatively large and occurs in a large area and across a variety of land tenure systems. Only about a quarter of the estiamted population occurs within formally proclaimed conservation areas (Moehlman, 2002). Detailed population figures, based primarily on aerial surveys are available in Moehlman (2002) with an estimate of c. 13,000 individuals in 1997.
South Africa: Occurrence reported (Skinner *et al.*, 1983). Virtually all the South African population of c. 366 animals were originally reintroduced from a Namibian stock (Moehlman, 2002).

The most important threat is livestock production and farming activities such as fencing, compounded by drought. Many landholders regard the animals as a nuisance and a competitor for scarce grazing and water. However, encouragement by the Ministry of Environment and Tourism in Namibia for commercial use of the animals has created considerable take-off pressure and may have caused localised population declines. In South Africa the sub-species is at risk of hybridization with *E.z.zebra* (Moehlman, 2002).

Although *E. zebra* is considered endangered (Equid Specialist Group, 1996) based on a suspected population decline of at least 50% in ten years or three generations, Moehlman (2002) doubts that the population figures support this idea and considers that the issue will remain unresolved until the overall population trend is established more reliably.

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INTERNATIONAL TRADE

Gross Exports of *Equus zebra hartmannae*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Namibia	bodies	4	11	0	1	6	0	0	0	1	0	1
Namibia	bones	0	0	0	0	0	0	0	1	18	1	0
Namibia	horn products	0	0	0	0	0	0	0	0	0	0	4
Namibia	live	2	4	0	0	78	140	0	0	0	0	0
Namibia	plates	0	0	0	0	0	1	2	0	1	0	0
Namibia	skin pieces	1	2	0	0	1	104	77	42	3	1	9
Namibia	skins	721	858	771	999	1540	2498	1466	1582	1763	1073	935
Namibia	skulls	0	0	2	0	8	2	3	4	7	4	11
Namibia	trophies	503	566	502	439	131	168	238	238	264	887	775
South Africa	plates	0	0	2	0	0	0	0	0	3	0	1
South Africa	skin pieces	0	0	0	0	0	0	2	2	4	10	2
South Africa	skins	93	95	65	166	10	379	183	38	65	44	37
South Africa	skulls	0	0	1	0	0	0	3	2	1	4	0

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
South Africa	trophies	12	40	21	17	19	53	48	44	67	44	54
Zimbabwe	live	0	0	0	0	0	0	30	0	0	0	0
Zimbabwe	skin pieces	0	0	0	2	0	0	0	0	0	0	0
Zimbabwe	skins	0	0	0	1	0	1	1	0	0	0	0
Zimbabwe	trophies	1	0	0	1	1	1	1	0	0	0	0

COMMENT

Recommended for review. Constant and relatively high level of trade from Namibia and lower levels from South Africa. Namibia has a widespread population but South Africa has a very small population. Suggested for review to determine whether current levels of trade are sustainable from these two countries.