Other Proposals

A. PROPOSAL

Inclusion of the populations of China and Mongolia of *Ursus arctos* in Appendix I in lieu of *Ursus arctos pruinosus*.

B. PROPONENT

Denmark.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Mammalia

12. Order: Carnivora

13. Family: Ursidae

14. Species: According to Ma (1983), there are three recognized subspecies of *U. arctos* in China. These are:

Ursus arctos isabellinus (Horsfield 1826) (CITES Appendix I)
Ursus arctos pruinosus (Blyth 1853) (CITES Appendix I)
Ursus arctos lasiotus (Gray 1867) (CITES Appendix II)

15. Common names:

English:	Tibetan brown bear
French:	ours brun du Tibet
Spanish:	Orso pardo del Tibet

16. Code Number:

2. Biological data

21. Distribution: *Ursus arctos* is the most widespread of bear species, ranging from northern Arctic to dry desert habitats throughout the northern hemisphere. Servheen (1990) estimated that by 1989, the species' range and numbers worldwide had been reduced by more than 50% since the mid-1800s and that the future of the species worldwide can only be assured in those areas comprising the northeastern and northwestern Soviet Union, Alaska, and Canada.

In China, *Ursus arctos* is distributed over three major areas of the country, two of them represented by the sub-populations ascribed to the CITES Appendix-I subspecies, *U. a. isabellinus* and *U. a. pruinosus* (Figure). As described by Ma (1983), *Ursus arctos isabellinus* inhabits forests at elevations of 700-4 000 m in central Asia, in the Tien-Shan and Pamir Mountains of western Xinjiang

Uygur; *U. arctos pruinosus* occurs at elevations of 4 500-5 000 m on the alpine grassy steppes and cold deserts of Qinghai-Xizang (Tibet) plateau from Qinghai and Kansu (Gansu province) south to Western Sichuan and Xizang (Tibet); and *U. a. lasiotus* occurs in forested areas of northeastern China in the Tahinganling, Wanda, and Changbai Mountains. Habitat loss and encroachment by man combined with unregulated harvest are causing contraction of *Ursus arctos'* range and accelerating insularization of its populations throughout China (Servheen, 1990).

Tien-Shan and the Pamir Mountains of Xinjiang Uygur (*U. a. isabellinus*): This population was formerly part of the population ranging across the whole of the north temperate zone in Asia, Europe and North America. It is now restricted to the Himalayan mountains of central Asia--Afghanistan, Pakistan, China, and the southeastern republics currently part of the Soviet Union and, possibly, Nepal and Bhutan. Schaller (1989 *in* Bräutigam, 1989) reported that in China, this population does not extend out to the Tibetan Plateau and is, therefore, isolated from the population occurring there.

Qinghai-Xizang (Tibet) plateau from Qinghai and Kansu (Gansu province) south to western Sichuan and Xizang (Tibet) (*U. a. pruinosus*): Schaller (1989 *in* Bräutigam, 1989) reported the distribution of *Ursus arctos* north of the Tibetan Plateau to be unclear: "a few" individuals occur in Outer Mongolia, and on the Plateau itself the range is decreasing rapidly; he believed its current stronghold to be the northwestern part of the Plateau, where it is "now the rarest large animal as a result of being relentlessly hunted."

In Mongolia, *U. a. pruinosus* is described as distributed in the mountains of the Transaltai Gobi, principally in the Tsagaan bogd, Hatan-Hairhan, Tost and Pemget mountain massifs, from Tost and Nemegetu uul in the east to Aj bogd in the west (Tsevegmid and Dashdorj, 1974).

Northeastern China in the Tahinganling, Wanda, and Changbai Mountains (*U. a. lasiotus*): Ma (1989 *in* Bräutigam, 1989) reported that while historically *Ursus arctos* was distributed much more extensively over this part of the country, its current range is decreasing with reduction in forest cover and human encroachment.

22. Population: The population of *Ursus arctos* is decreasing throughout its range, and some sub-populations (especially along the southern edge of Eurasia) are threatened. The species is likely to be extirpated in the near future in the Middle East and along the southern and eastern edge of its range (Servheen, 1990). In Asia Minor, there are fewer than 1 000 animals; during the 1940-1950's the combined populations of Iran, Iraq, Afghanistan (*U. a. isabellinus*) and Pakistan (*U. a. isabellinus*) were estimated at between 2 500 - 3 000 animals; northern Myanmar, Tibet, west China, Manchuria and Korea "probably" harbour a few thousand animals (Servheen, 1990).

In China, although detailed population surveys of bear populations have not been undertaken, a review of existing information points to two facts: bear numbers are not high, and they are in decline (Santiapillai and Santiapillai, 1988).

Tien-Shan and the Pamir Mountains of Xinjiang Uygur (*U. a. isabellinus*): Both Santiapillai and Ma (1989 *in* Bräutigam 1989) reported this population to be threatened with extinction due to excessive hunting and habitat loss. Schaller

(1988) found it to be extinct or very rare in the areas he studied. He asserted (1989 *in* Bräutigam, 1989) that *U. arctos* is rarer than *Panthera uncia* and that the major threats to its survival were shooting and trapping, not habitat destruction.

Qinghai-Xizang (Tibet) plateau from Qinghai and Kansu (Gansu province) south to western Sichuan and Xizang (Tibet) (*U. a. pruinosus*): Schaller and Santiapillai (1989 *in* Bräutigam, 1989) reported this population to be threatened with extinction. Santiapillai estimated the population in the Great Gobi National Park, Mongolia, to be extremely small, only 20 - 30 animals; Schaller reported the population to be small and composed only of "isolated, remnant [sub-] populations with widely-scattered individuals," even in remote areas. He identified hunting as the major threat.

Petocz (1988, *in* Servheen, 1990) reported *U. arctos* to be uncommon in the unsettled western portion of the 45 000 sq km Arjin Shau Mountains Nature Reserve north of Tibet. The area is considered pristine in the western section but in the eastern section is grazed by 12 000 domestic sheep.

Northeastern China in the Tahinganling, Wanda, and Changbai Mountains (*U. a. lasiotus*): Ma (1989 *in* Bräutigam, 1989) reported this population to be very small due to over-hunting and forest destruction. He reported, for example, that there are almost no bears in the mountain areas of eastern Liaoning province, an area in which they are known to have occurred historically.

In Mongolia, according to Mallon (1985), *Ursus arctos* occurs in four separate populations. The species is uncommon in the entire country, and recent regional extinctions have been reported.

23. Habitat: According to Servheen (1990), populations of *Ursus arctos* in both Europe and Asia are becoming increasingly fragmented as a result of human encroachment of their habitat. He expects the reduction of species' range into small units with limited resource diversity and no interconnection with other sub-populations to result in the extinction of some sub-populations of *Ursus arctos*, as well as of other bear species, including American black bears *Ursus americanus*, Asiatic black bears *Ursus thibetanus*, spectacled bears *Tremarctos ornatus*, and the giant panda *Ailurupoda melanoleuca* in the near future (Servheen, 1990).

Servheen (1990) points to fragmentation of *Ursus arctos* habitat and unregulated harvest as having a major detrimental impact on the species in China. Persecution of bears is also reported to be a problem in China: Santiapillai and Santiapillai (1988) reported that bears are hunted by "irate farmers whose crops are destroyed by bears," while Schaller and Petocz have both reported (*in* Servheen, 1990) that herdsmen shoot them on sight. Ma (1983) reported that *U. a. lasiotus* kill farm animals and occasionally injure humans; as a result, several hundred are killed each year.

24. Reproductive Biology/Ecological Parameters. A low reproductive rate and naturally low density in populations of *U. arctos* render the species susceptible to over-exploitation (Servheen, 1989; Santiapillai, 1989 *in* Bräutigam, 1989). Females do not attain sexual maturity until the age of 3 - 5 years, do not give birth to young every year, and generally only give birth to two cubs at a time.

In addition, reproductive success is dependent on seasonality and the availability of food (Santiapillai, 1989 *in* Bräutigam, 1989).

In addition, territories ranging from between 500 - 800 ha to as large as 5 000 - 10 000 ha (Santiapillai, 1989 *in* Bräutigam, 1989) dictate that extensive areas of available habitat are needed to sustain a viable population. Insularization of bears into small populations renders them more vulnerable than larger populations to random genetic changes, inbreeding depression, and local catastrophic events. Loss of genetic diversity reduces species' capacity to adapt to changing environmental conditions (Santiapillai and Santiapillai, 1988). Such problems can be minimized to some extent by linking protected areas to facilitate genetic exchange but, as mentioned above, that requires strategic establishment of reserve systems and maintenance and control over land-use patterns.

3. Trade data

While in Europe, North America, and much of the area currently comprising the Soviet Union, bears are most highly valued as a sport hunting animal, in Asia, they are highly valued for a variety of other uses: gall bladders for traditional medicines; paws, meat, and fat for food; and fur for clothing. A substantial trade in Asia in bear parts for these various uses exists in China, Japan, and the Republics of Korea, Taiwan and Thailand. The very high demand throughout Asia for bear gall bladder, in particular, as a cure for digestive problems, inflammation, and for blood purification, has resulted in a lucrative international trade, which has been fueled by increasing affluence in many of these countries. Gall bladders from bears of unknown species are available in most traditional medicine shops throughout Asia (Servheen, 1990). There is also a lucrative international trade in bear paws, a delicacy amongst Chinese not only in China, but also in Hong Kong, Singapore and Taiwan, and in Chinese restaurants in Japan (Milliken, 1985). Bears are sought after to enhance health and stamina by Korean tourists visiting Thailand, who eat them in special restaurants (Servheen, 1990; Mills, 1991).

Commercial trade for national and international markets is believed to threaten the survival of all Asian bear species (Santiapillai, Servheen *in* Bräutigam, 1989; Servheen, 1990); it may be the major threat (Servheen, 1990).

The importance of bear parts in Asia both culturally and economically is most analogous to that of horn and other products of rhinoceros. The very high demand for these products and increasing rarity of the species result in a very high price being paid for the commodity, which itself serves to fuel commercialization for lucrative national and international markets. Like other trades of this nature, most notably the trade in rhino horn, control of the market is difficult.

According to Servheen (1990), bear parts for these markets are increasing in value, and increasing rarity of supply is placing further pressure on remaining populations.

31. National Utilization: In China, bears -- the brown bear *Ursus arctos* (CITES Appendix I/II), Asiatic black bear *Ursus thibetanus* (CITES Appendix I), and sun bear *Helarctos malayanus* (CITES Appendix I) -- are heavily utilized for the purposes mentioned above, particularly their gall bladder for traditional medicine and their paws, liver, and fat, which are considered delicacies (Santiapillai and Santiapillai, 1988). Bear skins, also, are used for warm clothing (Schaller, 1989 *in* Bräutigam, 1989). Commercial demand for bear parts within the country is

high. The economic value of bear parts in China has already drastically reduced bear populations in the country (Servheen, 1990); at the same time it has resulted in bears being the only protected species in China that continue to be sold openly (TRAFFIC, 1991). Just as utilization appears to be unaffected by protective legislation, it appears equally non-selective in terms of species, although the Koreans are reported to prefer the species *Ursus thibetanus* (Milliken, 1985).

There are numerous reports of commercialization of bear parts in China. Schaller (1989 *in* Bräutigam, 1989) reported seeing bear paws for sale in restaurants in northeast China. Bear parts in the major Cantonese market were selling at US$ 135 per kilogram (roughly 2 paws) in 1990 (TRAFFIC, 1991). In June 1988, six men were arrested in Guangxi heading south from Sichuan with 40 live bear cubs in the back of their truck. (Wang, 1988 *in* TRAFFIC, 1991).

Bear specimens available for sale in China in 1990 included (TRAFFIC, 1991):

SPECIES	SPECIMEN	QUANTITY	PRICE (US$)
Ursus thibetanus	specimen	3	85 - small/155 large
	carcass	1	170
	paws	50+	135/kg
Ursus arctos	paws	20+	135/kg

Given the declining numbers of all bear species in China and increasing habitat fragmentation, "indiscriminate" hunting is believed to severely threaten these species in the country (Santiapillai, 1989 *in* Bräutigam, 1989).

32. Legal International Trade: (See 32. in proposal to include all populations of *Ursus arctos* in Appendix II all populations not included in Appendix I or II).

33. Illegal Trade: (See 33. in proposal to include all populations of *Ursus arctos* in Appendix II all populations not included in Appendix I or II).

34. Potential Trade Threats: (See 34. in proposal to include all populations of *Ursus arctos* in Appendix II all populations not included in Appendix I or II).

4. Protection Status

41. National: Santiapillai and Santiapillai (1988) reported that very little had been done in China to formulate conservation measures and laws to protect bears, although hunting had been prohibited in nature reserves. Servheen (1990) has more recently informed that additional legislation prohibiting trade in bears and bear parts has been enacted by the Chinese Government. *Ursus arctos* is listed in the Second Category (= Vulnerable) in the State Protected Species List of Wildlife attached to the Wildlife Protection Law of 1988.

It is evident from the level of trade currently taking place in *Ursus arctos* and other bear species in China that these legal prohibitions are ineffective. Increasing evidence of illegal wildlife trading in China raises further questions as to the enforcement of wildlife protective legislation in the country. Provincial authorities in China confiscated wildlife valued at US$ 1 million in Fujian in

September 1989. A recent TRAFFIC investigation into wildlife trade in and from China (1991) has documented a dynamic, opportunistic network of wildlife dealers operating throughout China but directed primarily towards the southeast, to overseas Chinese with the financial resources to purchase wildlife goods at the most lucrative of prices. "Rampant" smuggling of endangered and protected species from mainland China across the Taiwan Strait to Taiwan is one such problem. The threat of capital punishment is not an effective deterrent to the poaching of protected species, such as the panda *Ailuropoda melanoleuca*, as specimens of these species were available and offered for sale on several occasions to TRAFFIC investigators (1991). Although enforcement of wildlife legislation in China has at times appeared minimal, the Chinese authorities have, nevertheless, made such enforcement a high-profile issue.

Although reserves have been set aside in China to protect bears, Santipillai and Santiapillai (1988) question the adequacy of such reserves to harbour bear populations at high densities even in the most favourable of habitats, in light of the animals' demonstrated need for a large home range and dependence on seasonally abundant food items. Inadequate reserve size results in escalating conflicts with man, from which both turn out the losers.

In addition, protection of bears is reported to be minimal in reserves, because hunting still occurs (Santiapillai 1989; Schaller and Reid *in* Servheen, 1990). Schaller (1989 *in* Bräutigam, 1989) considered only one reserve, the Arjin Shan Reserve in Xinjiang, to have a truly protected population.

42. International: Two subspecies of *Ursus arctos*, representing the major proportion of the Chinese population of the species (see above) are included in CITES Appendix I. The population of Mexico (believed to be extinct, is also in Appendix I). Other Asian bear taxa are included in CITES Appendix I.

Ursus arctos is listed in Appendix II of the Berne Convention on the Conservation of European Wildlife and Natural Habitats.

43. Additional Protection Needs: Santiapillai and Santipillai (1988) argue that it is essential to curb exploitation of bears for their parts in China. While they doubt that exploitation can be stopped even with the best conservation education, due to the continued importance of traditional medicine, they emphasize that further effort be focused on curtailing exploitation to sustainable levels "at best and to providing substitutes at worst." In addition, they emphasize the need to increase the size of nature reserves, with buffer zones to separate the core areas from human encroachment. Finally, they argue for efforts to enhance the standard of living of human communities in bear habitat and respond positively to cases of bear depredations.

5. Information on Similar Species

All Asian bear species besides *Ursus arctos* are protected from international trade through their listing in CITES Appendix I; two of China's three subspecies/sub-populations are included in Appendix I; two bear populations/taxa are not included at all in the CITES appendices: the population of *Ursus arctos* of the Baltic States and the geographical area comprising the Soviet Union (except for *U. a. isabellinus*) and the North American black bear *Ursus americanus* are also proposed for inclusion in

CITES Appendix II for reasons of similarity of appearance to the Appendix-I Asian bears (see following supporting documentation).

Although live specimens and, in some cases, other parts of bear species are readily distinguishable, it is impossible to distinguish bear parts in the form in which they are marketed. This reality has stymied enforcement of local and international trade controls and allowed the differential treatment of bear taxa under national and international protection regimes to become a major loophole through which continued trade in protected and threatened bear species is by all evidence flourishing in much of Asia.

Evidence pointing to this problem was presented at the seventh meeting of CITES (Lausanne, 1989), when the sloth bear *Melursus ursinus* was proposed for Appendix-I listing:

> Between February 1981 and January 1988, a total of 365 kg of bear gall bladders, from an estimated 4 800 bears, had been imported by Japan from India declared as *M. ursinus*. It was considered unlikely that all of these gall bladders actually derived from this species and more likely that they included gall bladders of other Indian CITES Appendix-I species.

Therefore, in order to protect all Asian bear species, which are listed as Threatened by IUCN (1990) and included in CITES Appendix I, increased controls in trade in other bear taxa are necessary.

6. Comments from Countries of Origin

7. Additional Remarks

This supporting document has provided evidence of an extensive and very lucrative trade in bears and bear products. This trade is known or strongly suspect to have included CITES Appendix-I taxa, either subspecies of *Ursus arctos* or the species *Ursus thibetanus and Helarctos malayanus* and, since 1990, *Melursus ursinus*.

In addition, this supporting document has provided information to support three salient facts: 1) the populations of the CITES Appendix-I subspecies *U. a. isabellinus* and *U. a. pruinosus* in China comprise a significant proportion of the species' population in the country; 2) there is a substantial trade in bear parts and products from China to international markets; and 3) that the population of *Ursus arctos* in the country, including the CITES Appendix-II subspecies *U. arctos lasiotus* is under demonstrable threat of extinction, along with China's other (Appendix-I) bear species, due to habitat destruction and over-exploitation for national and international markets. For these reasons, the population of China of *Ursus arctos* qualifies for inclusion in CITES Appendix I.

As the population of *Ursus arctos* in Mongolia is believed to be the subspecies *U. a. pruinosus*, the replacement of the subspecies listing by the population of Mongolia should be viewed as *pro forma.*

8. References

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