



## WILDLIFE TRADE MONITORING UNIT

# Traffic Bulletin

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*Illustration of Mexican Red-kneed Tarantula by Sarah Anne Hughes*

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## Honduras Joins CITES

Honduras has become the 88th Party to CITES, acceding to the Convention on 15 March 1985. The accession becomes effective on 13 June 1985.

## TRAFFIC Committee Formed

A new committee has been formed, under the auspices of the International Union for Conservation of Nature and Natural Resources and the World Wildlife Fund, and with the agreement of the six existing TRAFFIC offices, to oversee the development and performance of the TRAFFIC Network. The TRAFFIC Committee will be chaired by Dr Michael Tillman, Director of IUCN's Conservation Monitoring Centre, and will hold its inaugural meeting at the end of April 1985, in Buenos Aires.

## TRAFFIC for Uruguay

A new TRAFFIC office has been established in Uruguay, as an independent organization. This is the first TRAFFIC office in the region and is to be called TRAFFIC (South America). It is funded, for its first year, by World Wildlife Fund-US and started operations in March 1985 under the Directorship of Juan S. Villalba Macias.

Sr Villalba Macias is already well-known in the region. He has been the Technical Supervisor for CITES in Uruguay, and therefore brings considerable knowledge and experience to his new post.

The formal entry of TRAFFIC (South America) into the TRAFFIC Network is subject to approval at the first meeting of the new TRAFFIC Committee.

## IUCN Calls Spain to Stop Chimp Trade

Beach resort photographers in Spain have been importing baby Chimpanzees (*Pan troglodytes*) for about fifteen years, even though commercial import is prohibited. The photographers, however, have evaded the law by importing their animals as "domestic pets".

Reporting on this in 1982 (*Bulletin* IV(2):24) we noted: that the Barcelona authorities were refusing import of Chimpanzees for any reason; that the Customs authorities in Alicante had promised to refuse them entry in the future; and that, in Costa Brava, the mayor of Lloret de Mar had discovered two sanitary regulations prohibiting photographers with Chimps from entering bars, restaurants, hotels, beaches and so forth. It appeared that matters were gradually improving. However the appearance was deceptive.

Over the years, as many as 200 chimps have been in use at any one time on the Canary Islands (mainly Tenerife), the Balearic Islands and in the fashionable Mediterranean resorts. Usually the animals become dangerous and unmanageable at about four years old; when this happens they are killed. To make them easier to handle they are often drugged heavily and sometimes they have a number of teeth extracted to avoid customers being bitten. They are taught obedience using punishments such as burning with cigarettes. Some Chimps are shared by two photographers and may therefore be used for up to sixteen hours a day.

Estimates of the number of Chimps imported into Spain since the craze began vary from about 800 to well over 1500. Moreover, during the process of capture of young Chimps, the mother is generally killed, as may be defending males, and many of the animals taken die in transit. Simon and Peggy Templer (who carried out the first survey of beach Chimps in 1981/82) and WWF-France estimate that about 700 wild Chimpanzees are killed, captured or die in transit every year to maintain a steady population of 200 in Spain. Thus the total number of animals accounted for by the resort photographers may be well over 10 000. Some sources say the figure is nearly double this.

Most of the Chimpanzees have reached Spain via the Canary Islands and Belgium. With some notable exceptions (Malaga's Civil Governor, Benidorm's Mayor and a few others on the Mediterranean coast and on the Balearics) the Spanish authorities appear so far to have been indifferent to the trade, in spite of its illegality. Mr Imre de Boroviczény reports that, in Tenerife, the photographers are said to pay a monthly fine of £250 and are then left alone; they can earn four times this amount in a single day.

Many organisations have campaigned against the trade, notably World Wildlife Fund national organisations and the World Society for the Protection of Animals, as well as the Templers. The Templers have even set up a rescue centre for confiscated animals on their eight-hectare property, with facilities to keep up to a hundred Chimps. Seventeen are to be shipped to the Gambia and Ivory Coast for release into Reserves. The various campaigns have led to the confiscation, from photographers, of twenty Chimps, but the problem is that they are simply replaced by more imports, or given back to the photographers. At the IUCN General Assembly, held in Madrid from 5 to 14 November 1984, a Resolution was passed on this subject.

"Aware that the situation is deteriorating because some confiscated Chimpanzees have recently been returned to the photographers under existing laws," IUCN "calls upon Spain to stop the importation of Chimpanzees for commercial use;" and "Recommends strongly that Spain adopts legislation requiring the confiscation of all Chimpanzees now being commercially exploited." It is probable that the situation will only improve if both these Recommendations are acted upon by the Government of Spain.

Nine Chimpanzees that have been confiscated in recent months have been tested by the New York Blood Center. Three of these animals were found to be carriers of Hepatitis 'B' infection. Although the sample is small, this could imply that as many as one in three of the 200 chimps could be actively carrying the disease and thereby endangering those with whom they come into contact.

*Sources: Imre de Boroviczény: IUCN/SSC Spain  
Mark Carwardine: WWF-UK  
Victor Watkins: WSPA*

## Rhino Horn Update

The following data are from the official Customs statistics of the Republic of Korea and Taiwan and update the table published in *Bulletin* VI(1):3/4.

Importing Country	Year	Country of Consignment	Quantity (kg)	Value \$US
S. Korea	1983	Indonesia	300	161209
	1984*		(nil)	
Taiwan	1983	South Africa	117	81049
	1984**		(nil)	

\* January to October, \*\* January to July

## Amendments to Appendices I and II of CITES

At each biennial meeting of the Conference of the Parties to CITES, proposals to amend Appendices I and II of the Convention are considered. These proposals are made to take into account the changing biological status of species in trade, the changing threats to commercially exploitable species and, especially recently, changing perceptions of the desirability of exploitation of locally abundant populations of threatened species.

In accordance with the provisions of Article XV, paragraph 1(a) of the Convention, twenty-one Parties have communicated, to the CITES Secretariat, proposals to amend Appendices I and II. These proposals will be considered at the fifth meeting of the Conference of the Parties to CITES, to be held in Buenos Aires, Argentina, from 22 April to 3 May 1985.

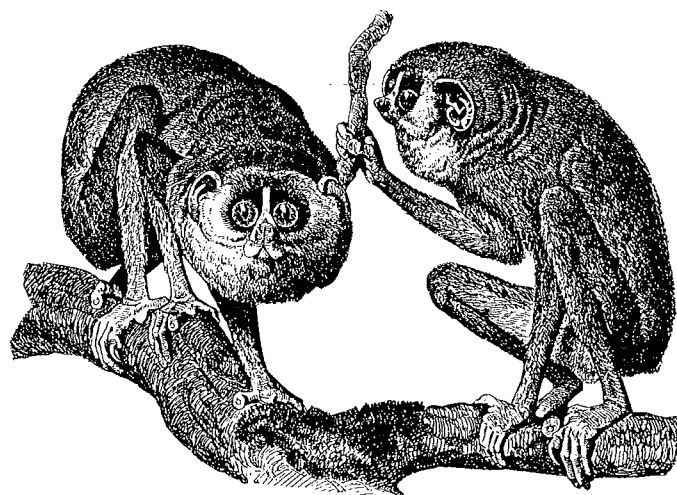
The proposals that have been made are listed below in taxonomic order. The country proposing the amendment is included in square brackets following each species name. The bracketed figures following each proposal indicate the minimum gross volume of trade of specimens of that species indicated by the records in the annual reports of CITES Parties, for the years 1980-1983 inclusive, other than made-up products. (art. prop.) = artificially propagated.

A few animals reported by Parties as "live" exports may have been reported by the importing Party as being "live (captive bred)", and vice versa; we have tried to allow for this in estimating minimum gross trade volumes.

### MAMMALIA

- Loris tardigradus, Slender Loris, [India] transfer from App. II to App. I. (13 live, 3 live (captive bred), 4 specimens).
- Alouatta palliata, Mantled Howler, [Costa Rica] deletion from App. I. (10 live).
- Presbytis entellus, Entellus Langur, [India] transfer from App. I to App. II. (15 live, 8 live (captive bred)).
- Presbytis phayrei, Phayre's Leaf Monkey, [India] transfer from App. II to App. I. (No reported trade).
- Pygathrix (Rhinopithecus) spp., Golden/Stub-nosed Monkeys, [China] transfer from App. II to App. I. (2 live P. roxellana).
- Vulpes (Fennecus) zerda, Fennec Fox, [Tunisia] inclusion in App. II. (24 live, 4 live (captive bred), 1153 skins - App. III trade).
- Selenarctos thibetanus, Asiatic Black Bear, [China] transfer from App. I to App. II. (90 live, 174 live (captive bred), 162 skins, over 4000 derivatives).
- Felis bengalensis bengalensis, Leopard Cat, [China] transfer of the Chinese population from App. I to App. II. (Total world trade: 2 live, 6 live (captive bred), 67 trophies).
- Mirounga angustirostris, Northern Elephant Seal, [United States of America] deletion from App. II. (4 skins).
- Cystophora cristata, Hooded Seal, [Sweden] inclusion in App. II.
- Monodon monoceros, Narwhal, [F.R. Germany] transfer from App. II to App. I. (475 tusks).

Slender Loris  
(Loris tardigradus)



### MAMMALIA (ctd)

- Equus kiang, Tibetan Wild Ass, [India] (transfer from App. II to App. I. (7 live)).
- Camelus bactrianus, Bactrian Camel, [China] inclusion in App. I.
- Cervus albirostris, White-lipped (Thorold's) Deer, [China] inclusion in App. I.
- Muntiacus crinifrons, Black Muntjac, [China] inclusion in App. I.
- Budorcas taxicolor, Takin, [China] inclusion in App. I.

### AVES

- Jabiru mycteria, Jabiru, [Costa Rica] inclusion in App. I.
- Falco jugger, Laggar Falcon, [India] transfer from App. II to App. I. (3 live).
- Falco rusticolus, Gyrfalcon, [Denmark and Norway] transfer of the North American population from App. II to App. I. (Total world trade 41 live, 85 live (captive bred), 11 bodies).
- Gruidae spp., Cranes, [United Kingdom] inclusion in App. II of all species not already included in App. I and II.
- Ara ambigua, Buffon's Macaw, [Costa Rica] transfer from App. II to App. I. (9 live).
- Ara macao, Scarlet Macaw, [Costa Rica] transfer from App. II to App. I. (2808 live, 3 live (captive bred)).

### REPTILIA

- Kachuga tecta tecta, Indian Roofed Turtle, [Bangladesh and India] transfer from App. I to App. II. (No reported trade).
- Chelonia mydas, Green Turtle

[France] transfer of the populations of Europa and Tromelin Islands from App. I to App. II\*. (Total world trade of 14 817 shells, 9 353 883 kg meat, 1852 scales).

REPTILIA (ctd)- Chelonia mydas, Green Turtle (ctd)

[Indonesia] transfer of the Indonesian population from App. I to App. II.

[Suriname] transfer of the population of Suriname from App. I to App. II\*.

[United Kingdom] transfer of the captive population in the Cayman Islands from App. I to App. II\*.

- Eretmochelys imbricata, Hawksbill Turtle

[Indonesia] transfer of the Indonesian population from App. I to App. II. (Total world trade: over 4376 shells, 185 kg shells, 906 kg scales). NB. A recent study by WTMU indicates that the world export trade is in the region of 150 t of raw shell a year.

[Seychelles] transfer of the population of Seychelles from App. I to App. II.

- Lissemys punctata punctata, Spotted Flap-shell Turtle, [Bangladesh] transfer from App. I to App. II. (No reported trade).- Trionyx gangeticus, Ganges Soft-shelled Turtle, [India] transfer from App. I to App. II. (200 live reported by the USA as exported to Réunion).- Trionyx hurum, Peacock-marked Soft-shelled Turtle, [India] transfer from App. I to App. II. (No reported trade).- Crocodylus niloticus, Nile Crocodile

[Malawi] transfer from App. I to App. II. (Total world trade: over 36 254 skins).

[Mozambique] transfer of the Mozambican population from App. I to App. II.

- Crocodylus porosus, Estuarine or Salt water Crocodile

[Australia] transfer of the Australian population from App. I to App. II\*. (Total world trade: over 3754 skins).

[Indonesia] transfer of the Indonesian population from App. I to App. II\*.

- Varanus bengalensis, Indian Monitor, [Bangladesh] transfer from App. I to App. II. (59 live, 356 322 skins, 157 skin/leather items).- Varanus flavescens, Yellow Monitor, [Bangladesh] transfer from App. I to App. II. (Over 106 796 skins, 1410 skin/leather items).- Hoplocephalus bungaroides, Broad-headed Snake, [Australia] inclusion in App. II.AMPHIBIA- Bufo perigrinus, Golden Toad, [Costa Rica] transfer from App. I to App. III for Costa Rica. (600 skins reported as imported by the USA from Switzerland, origin Brazil. However Switzerland reported the export of 600 skins of Bufo paracnemis, Rococo Toad, (non-CITES), to the USA, origin Brazil).- Rheobatrachus spp., Platypus Frog/Gastric-brooding Frog, [Australia] inclusion in App. II.AMPHIBIA (ctd)- Rana hexadactyla, Six-fingered frog [F.R. Germany] inclusion in App. II.- Rana tigerina, Indian Bullfrog, [F.R. Germany] inclusion in App. II.MOLLUSCA

## [Australia]

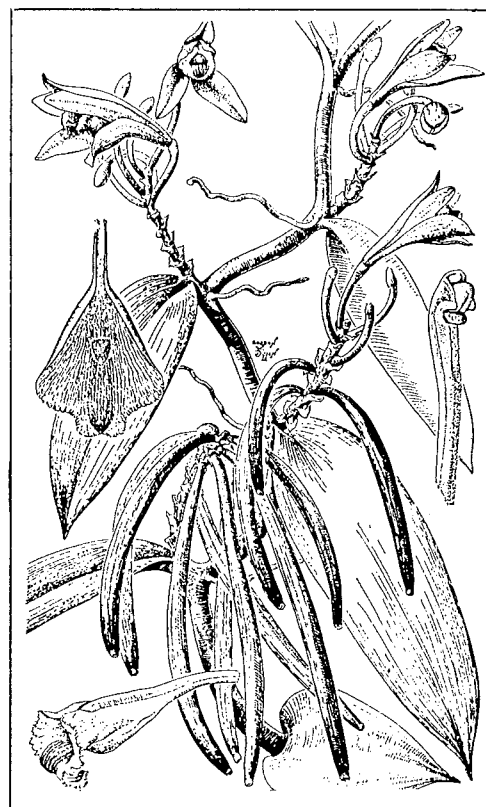
- Hippopus hippopus, Horse's Hoof Clam, inclusion in App. II.- Hippopus porcellanus, Strawberry Clam, inclusion in App. II.- Tridacna crocea, Crocus Clam, inclusion in App. II.- Tridacna maxima, Fluted Clam, inclusion in App. II.- Tridacna squamosa, Boring Clam, inclusion in App. II.ARACHNIDA- Brachypelma smithi, Mexican Red-kneed Tarantula, [United States of America] inclusion in App. II.CNIDARIA

## [Australia]

- Seriatopora spp., Birds Nest Corals, inclusion in App. II.- Pocillopora spp., Brown Stem Cluster Corals, inclusion in App. II.- Stylophora spp., Cauliflower Corals, inclusion in App. II.- Acropora spp., Branch Corals, inclusion in App. II.- Pavona spp., Cactus Corals, inclusion in App. II.- Fungia spp., Mushroom Corals, inclusion in App. II.- Halomitra spp., Bowl Corals, inclusion in App. II.- Polyphyllia spp., Feather Corals, inclusion in App. II.- Favia spp., Brain Corals, inclusion in App. II.- Platygyra spp., Brain Corals, inclusion in App. II.- Merulina spp., Merulina Corals, inclusion in App. II.- Lobophyllia spp., Brain root Corals, inclusion in App. II.- Pectinia spp., Lettuce Corals, inclusion in App. II.- Euphyllia spp., Brain trumpet Corals, inclusion in App. II.- Millepora spp., Wello Fire Corals, inclusion in App. II.- Heliopora spp., Blue Corals, inclusion in App. II.- Tubipora spp., Organpipe Corals, inclusion in App. II.FLORA- Gymnocarpus przewalskii, [Switzerland] deletion from App. I. (No reported trade).- Melandrium mongolicus, [Switzerland] deletion from App. I. (No reported trade).- Silene mongolica, [Switzerland] deletion from App. I. (No reported trade).- Stellaria pulvinata, [Switzerland] deletion from App. I. (No reported trade).- Saussurea lappa, Kuth, [India] transfer from App. II to App. I. (16 293 kg live, 53 000 kg roots).- Fitzroya cupressoides, Chilean False Larch, [Chile] transfer of the population of The Andes in Chile from App. I to App. II. (Total world trade: 45 211 kg, 380 cu.m, 7191 pieces, 115 855 inches, 100 764.22 sq.m).- Cycas panzhihuaensis, Panzhihua Suetie, [China] transfer from App. II to App. I.

## FLORA (ctd)

- Anigozanthos spp., Kangaroo Paws, [Australia] deletion from App. II. (4518 live, 1140 live (art.prop.), 18 437 kg flowers, 30 908 flowers, 5929 sets of flowers, 10 cartons).
- Macropidia fuliginosa, Black Kangaroo Paw, [Australia] deletion from App. II. (1284 kg flowers, 3130 flowers, 67 sets of flowers).
- Ammopiptanthus mongolicum, [Switzerland] deletion from App. I. (No recorded trade).
- Thermopsis mongolica, [Switzerland] deletion from App. II. (No recorded trade).
- Cattleya aclandiae, [Brazil] transfer from App. II to App. I. (604 live, 71 live (art.prop.) 18 pieces).
- Cattleya amethystoglossa, [Brazil] transfer from App. II to App. I. (212 live, 217 live (art.prop.), 34 flasks live (art.prop.), 986 cultures).
- Cattleya dormaniana, [Brazil] transfer from App. II to App. I. (319 live, 130 live (art.prop.), 137 pieces).
- Cattleya granulosa (= schofieldiana) [Brazil] transfer from App. II to App. I. (69 live, 98 live (art.prop.), 60 cultures, 40 pieces).
- Cattleya schilleriana, [Brazil] transfer from App. II to App. I. (205 live, 8 live (art.prop.), 3 pieces).
- Cattleya schofieldiana, [Brazil] transfer from App. II to App. I. (69 live, 98 live (art.prop.), 60 cultures, 40 pieces).
- Cattleya velutina, [Brazil] transfer from App. II to App. I. (203 live, 8 live (art.prop.), 2 pieces).
- Laelia tenebrosa, [Brazil] transfer from App. II to App. I. (22 live, 16 live (art.prop.), 22 pieces).
- Cathaya argyrophylla, Yinshan, [China] inclusion in App. I.
- Banksia spp., Native Honeysuckles, [Australia] deletion from App. II. (78 657 live, 26 867 live (art. prop.) 617 kg live (art. prop.) 49 252 kg flowers, 233 350 flowers, 24 379 sets of flowers and leaves, over 300 cartons).
- Conospermum spp., Smokebushes, [Australia] deletion from App. II. (3413 kg flowers, 341 flowers, 1343 sets flowers).
- Dryandra formosa, Showy Dryandra, [Australia] deletion from App. II. (589 kg flowers, 10 flowers, 1334 sets of flowers, 4 cartons).
- Dryandra polycephala, Many-headed Dryandra, [Australia] deletion from App. II. (Over 2600 kg flowers, 8704 sets of flowers, over 28 flowers, 3 cartons).
- Xylomelum spp., Woody Pears, [Australia] deletion from App. II. (1161 kg flowers, 4 sets of flowers).
- Crowea spp., [Australia] deletion from App. II. (185 kg flowers, 103 sets flowers).
- Geleznowia verrucosa, [Australia] deletion from App. II. (2840 kg flowers).
- Camellia chrysantha, Jinhuacha, [China] inclusion in App. I.
- Pimelea physodes, Qualup Bell, [Australia] deletion from App. II. (500 kg flowers).
- Caryopteris mongolica, [Switzerland] deletion from App. II. (No recorded trade).
- Ceratozamia spp., Cycads, [USA] transfer from App. II to App. I. (12 348 live, 31 live (captive bred)).



(Vanilla planifolia)

© reproduced from Encyclopaedia of Cultivated Orchids by Alex D. Hawkes, courtesy of Faber & Faber Ltd.

FLORA spp., plants, [USA] listed in App. II, inclusion of all parts and derivatives, except:

I seeds, spores and pollen (including pollinia) except:

seeds of Agave victoriae-reginae, Shortia galacifolia, Kalmia cuneata, Lewisia spp., Cycadaceae spp., Stangeriaceae spp., and Zamiaceae spp.

II tissue cultures and flaked seedling cultures;

III for particular plant species:

a. cut flowers of artificially propagated Orchidaceae spp.;

b. separate leaves and parts and derivatives thereof of naturalized or artificially propagated Aloe vera, Barbados Aloe;

c. fruits and parts and derivatives thereof of artificially propagated Vanilla spp.;

d. parts and derivatives, other than roots, and readily recognizable parts thereof of Panax quinquefolius; and

e. fruits and parts and derivatives thereof of naturalized or artificially propagated Cactaceae spp., and separate stem joints (pads) and parts and derivatives thereof of naturalized or artificially propagated Opuntia spp., Prickly Pears.

\*\*\*\*\*

\* these proposals are submitted pursuant to Resolution Conf. 3.15 on Ranching, adopted by the Conference of the Parties in New Delhi (1981).

## Tarantula Sales Under Scrutiny

by N. Mark Collins

The USA has proposed that the Red-kneed Tarantula, (*Brachypelma smithi*), a large spider from Mexico, be added to Appendix II of CITES. A decision will be reached by the Parties to the Convention at the forthcoming biennial meeting in Buenos Aires. This note is intended as background information to the proposal.

Concern for the conservation of the spider was first expressed in The IUCN Invertebrate Red Data Book (Wells *et al.*, 1983), in which the existence of a substantial trade was acknowledged. However, no evidence of harm to the spider resulting from the trade was available and the spider was categorised as "Insufficiently Known". Subsequently, the Environmental Defense Fund proposed to the US Fish and Wildlife Service (USFWS) that the spider be added to Appendix II. The USFWS published a preliminary request for information in the Federal Register (USFWS, 1984a) and then agreed to propose the spider for listing (USFWS, 1984b).

The Red-kneed Tarantula is a burrowing spider of semi-desert habitats in six states from Sonora to Guerrero, west of the Sierra Madre Occidental in Mexico. It has poisonous jaws and feeds mainly on insects but, because of its attractive red markings and relatively docile behaviour towards man, it has acquired some popularity as a pet. It can fairly easily be bred in captivity, but is slow to mature. Adults mate when four to seven years old and may live for up to twenty years. Demand for the spider has been growing in recent years and most of the commerce is in wild-caught specimens. Outlets are mainly in north America and Europe, but much of the trade is probably channelled through southern US ports.

Concern for the welfare of the spider is caused by the lack of information on precisely how, where, and in what numbers, it is collected. There are no scientific data that can be used to evaluate a sustainable yield and the present trade is continuing in ignorance of its impact.

In Mexico, all hunting and export of wild animals is prohibited except under licence. Theoretically, the

issuing of licences requires scientific scrutiny and assessment, but there are insufficient scientific data upon which to base such endorsements. Nevertheless, it is known that in 1982, for example, licences to collect 6000 specimens of *B. smithi* were issued. Recorded imports of live arachnids (including scorpions and all spiders) into the US from Mexico that year, amounted to 21 893 specimens (USFWS, *in litt.*). It is not known how many of these were *B. smithi*, but there is no reason to suspect a high proportion.

It is necessary to rationalise the trade in the Red-kneed Tarantula in order to ensure a sustainable harvest and preserve the well-being of the species. Scientific research into the biology and population dynamics of the spider is a prerequisite to an assessment of harvesting methods and intensity. Mexican monitoring and licensing procedures are in operation but there is a need to enhance the scientific scrutiny of harvesting operations. International encouragement would be advantageous.

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N. Mark Collins is the research officer for insects and spiders at the IUCN Conservation Monitoring Centre in Cambridge, UK.

## Concern Over Japanese Bear Trade

by Tom Milliken, *TRAFFIC* (Japan)

### Introduction

The People's Republic of China has submitted a proposal to transfer the Asiatic Black Bear (*Selenarctos thibetanus*) from CITES Appendix I to Appendix II at the fifth meeting of the Conference of the Parties. Nepal submitted a similar proposal that was subsequently withdrawn. Neither of the proposals has included any information on current international trade in the species. However, an analysis of Japan's trade in bears indicates that the Asiatic Black Bear is already the focus of considerable international trade, most of which occurs in violation of the Convention.

### South Korean demand for Japanese bears

In late 1983, the Japanese NHK Television Network broadcast a special programme highlighting a burgeoning trade from Japan to the Republic of Korea (South Korea) of the endangered Asiatic Black Bear. The export boom was attributed to S. Korea's continuing use of bear gall bladder in traditional "hanyuk" medicine, and thus challenged the notion that most of the trade is for S. Korean zoos.

The belief in bear gall bladder as a cure for digestive problems, inflammation, and blood purification is widespread throughout S. Korea. It is commonly available over the counter at the thousands of "hanyuk" shops or is dispensed through some 3600 "hanyuk" clinics and hospitals found throughout the country.

According to the television programme, S. Korean importers became particularly active in the summer of 1981, ordering up to forty animals at a time from zoos and wildlife traders throughout Japan. "Pet" bear owners were suddenly inundated with telephone calls from prospective exporters; the price for Japanese Black Bears suddenly jumped from Y400 000 - 500 000 (US\$1 740 - 2 175) to over Y700 000 (US\$3000) per animal.

A network apparently sprang up throughout Japan to supply animals for the Korean market. One dealer interviewed in the NHK film claimed to have a list of all hunting associations and pet bear owners in Japan and through these contacts had been able to procure seventy animals for export. In addition to purchasing animals outright, bear cubs were often exchanged for more commercially valuable animals.

Although the bears are ostensibly shipped to S. Korea for zoos, most are eventually slaughtered for their gall bladders. NHK reported that the gall bladder alone is worth two-thirds of the price of the bear, with the pelt, paws, and claws accounting for the remaining value of the animal.

**Table 1**  
**Japanese Live Exports of Asiatic Black Bear**

Year	Number	Purpose		PC	Remarks	
		Zoos	Trade		CB	PC+CB
1980*	18	18			not given	
1981	20	20	-		"	
1982	108	18	90	14	94	-
1983**	78	-	78	24	21	33
TOTAL:	224	56	168	38	115	33

PC = Pre-Convention    CB = Captive-Bred

\* Nov. and Dec. only

\*\* An additional 6 kg of *S. thibetanus* 'bear bile' were exported to S. Korea.

Source: Japanese CITES Annual Report

Through independent research, TRAFFIC (Japan) has confirmed most of the NHK findings. Of the two types of bear found in Japan, the Brown Bear (*Ursus arctos*) is indigenous to Hokkaido, while the Asiatic Black Bear (*Selenarctos thibetanus*) has an historic distribution throughout Honshu, Kyushu, and Shikoku. As the latter species is listed on CITES Appendix I, the Japanese export trade is subject to CITES controls even though S. Korea has yet to join the Convention.

#### Japanese Exports - Captive Bred?

It appears from its Annual Report to CITES, that the Japanese Government has permitted a substantial export trade in Asiatic Black Bears to S. Korea since becoming a CITES Party in November 1980. Between that time and December 1983, Japan reports having exported 224 live Asiatic Black Bears to S. Korea, with the trade greatly increasing in 1982 (see Table 1).

CITES only permits commercial trade in Appendix I species under exceptional circumstances. Appendix I species "bred in captivity" may be traded under the special conditions elaborated in Conference Resolution Conf. 2.12 adopted by the Parties in 1979.

Unfortunately, the "bred in captivity" exemption has been frequently abused as a cover for illicit trade in Appendix I species. As a result, in 1983 the CITES Parties agreed, through Conference Resolution Conf. 4.15, to provide the Secretariat with appropriate information regarding all legitimate captive-breeding operations of Appendix I species for commercial purposes and to co-operate with the Survey on Farming and Ranching being undertaken by WTMU.

Although over two-thirds of Japan's Asiatic Black Bear exports to S. Korea since 1982 have been declared as "captive-bred", there is reason to doubt that there is any captive-breeding of the species in Japan that meets CITES standards. Although Japan has yet to respond to Conf. 4.15, to date sixty-two countries are included in the "Register of Operations which Breed Specimens of Species included in Appendix I in Captivity for Commercial Purposes" and, of these, only two countries have recognized legitimate captive-breeding operations, both for crocodile species.

In order to verify the legitimacy of the "captive-bred" exemption for the growing bear trade, TRAFFIC (Japan) prepared a translation of WTMU's questionnaire to elicit information on ranching and farming operations. TRAFFIC also sought the co-operation of the Environment Agency for circulation of the questionnaire in Japan, as it was believed that

frank responses would not be forthcoming unless there were Government sanction of the survey. Unfortunately, the Environment Agency declined TRAFFIC's request to be associated with the survey effort. Nonetheless, questionnaires were sent to eight establishments allegedly involved in the captive-breeding of bears. Of these, four replied, stating they were not engaged in international commercial trade in the species. The evidence indicates that all sizeable populations of captive Asiatic Black Bears are held at "bear ranches" which function as tourist attractions.

#### South Korean Imports Increase

The Korean Society for the Protection of Wild Animals (KSPWA) has provided S. Korean Customs data for imports of live bears. These reveal that the trade may be even larger than the Japanese CITES Annual Report indicates. Bear imports in the S. Korean statistics are greater than the Japanese data for every year except 1982 (see Table 2). According to some S. Korean sources, in that year tariff duties were raised to sixty per cent and bear importers tried to conceal some of their trade in order to avoid the high tariff. This probably accounts for the discrepancy. At the same time, the importation of live bears was made easier. Previously, all bear imports into S. Korea needed the prior recommendation of the Chairman of the KSPWA which was given only after a stringent review of the purpose for importation and the management plan for captivity.

Conversely, TRAFFIC has received unconfirmed information that shipments of Asiatic Black Bears have passed through the Japanese port of Shimonoseki to S. Korea without proper CITES documentation, which could, if true, explain the higher figures in the S. Korean data for 1981 and 1983. TRAFFIC estimates that, since 1980, using the highest figures for each year, more than 280 Asiatic Black Bears have been exported from Japan to S. Korea and believes that most of the trade is in violation of CITES controls. Korean Customs statistics show Canada, F.R. Germany and the USA as sources of seventy-six bears (species unknown) from 1980 to 1983. These countries reports to CITES record only four Asiatic Black Bears exported to S. Korea from Germany and only five from the USA.

**Table 2**  
**South Korean Live Bear Imports**

Year	Number	Country of Export			
		Japan	Canada	Germany	USA
1980	56	56	-	-	-
1981	25	25	-	-	-
1982	100	75	18	7	-
1983	149	98	31	8	12
TOTAL	330	254	49	15	12

Source: South Korean Customs Statistics

#### South Korean bears receive protection

*Selenarctos thibetanus* is the only bear species indigenous to S. Korea, where it is critically endangered. Traditionally local bears were exploited, which probably accounts for the Korean preference for the Asiatic Black Bear over other species. Since 1980, the KSPWA has been engaged in a five-year nationwide survey of the species. Results in 1982 established a total population of fifty-seven bears in five separate locations. In December 1982 the species was granted total protection in S. Korea



so that current demand for bear gall bladder relies totally upon foreign sources.

There is no evidence to suggest that bears are being bred in captivity in S. Korea. In 1983, according to KSPWA, there were 338 bears kept in S. Korean public and private zoos, but none of them was breeding bears for their gall bladders. However, private individuals and companies may keep bears if permission is obtained from the local government, and it appears that they conduct, accordingly, most of the import trade. Apparently they routinely kill their animals but claim they die from natural causes.

The value of Asiatic Black Bears in S. Korea is tremendous. An animal shot in Gongju in 1982 sold for 16 million won (US\$18 500) through public tender at a Government sponsored auction. Since then the price of the gall bladder has risen sharply. A 180-g gall bladder from an animal killed by a poacher in 1983 sold for an exceptional 46 million won (US\$55 000) at a public auction, and the meat sold for 1.53 million won (US\$1830). The paws, claws, and pelt of bears are also valuable.

Publicity surrounding an attempt to import fake bear gall bladder in 1983 apparently led to a degree of public scepticism regarding the quality of commonly available bear gall bladder stocks and consumption reportedly dropped. Some dealers complained that the effect could lead to the closing of some of the "hanyuk" clinics which specialise in bear gall bladder treatments. Meanwhile it seems that S. Korean orders for bears are still being received in Japan. At the same time, S. Korean importers may be trying to establish new sources of Asiatic Black Bears. In 1984 a group of S. Koreans tried to secure exports from Thailand on the pretence that the animals would be exhibited at the Seoul Olympics (Boonlerd, pers. comm.).

#### Hunting Adds Threat to Japanese Bears

Both of Japan's bear species may be killed under licence, as game animals, but they are also designated "pests" allowing "problem" animals to be shot without a permit. According to the Environment Agency, in 1981 2710 Asiatic Black Bears were killed. At the same time, bear research is practically non-existent and there are no reliable population estimates available. Distribution surveys, however, confirm that the range of the Asiatic Black Bear is declining. According to reliable sources, the species is almost certainly extinct in Kyushu, and critically endangered in Shikoku. In addition to being subjected to virtually all of the Japanese hunting pressure, Honshu populations are experiencing widespread habitat loss due to deforestation for monoculture tree plantations. The export trade of live specimens clearly contributes further to the pressures.

#### Japanese bear gall bladder imports remain high

As in S. Korea, bear gall bladder is also utilized for treatment of liver, stomach and intestinal ailments in the Japanese traditional "kampoyaku" medicine. The popularity of bear gall bladder remains high, but S. Korean willingness to pay higher prices has apparently shut the Japanese out of their home market. Japanese dealers maintain that it is difficult for them to obtain the substance from local sources and when they can, it is twice as expensive as imported gall bladder. As a result, the domestic consumption of bear gall bladder relies almost exclusively upon foreign imports. Japanese Customs statistics record bear gall bladder imports in a specific category together with "toad cake", a dried secretion obtained from toad species of the genus *Bufo*. Between 1979 and 1984, a total of 6624 kg have been recorded in the data, with China providing over seventy per cent of the trade (see Table 3).

Both substances are obtained from China, and in fact, all toad cake is purported to originate from there. Unlike bear gall bladder, toad cake is not sold over the counter at Japan's "kampoyaku" shops. Instead toad cake is only used as an ingredient in non-prescription patented medicines taken to strengthen the heart. Approximately twenty companies are involved in the manufacture of these medicines, but it has not yet been established how much toad cake is required for annual production.

Therefore, it is not easy to say how much of the imports from China are of bear gall bladder. According to wholesalers contacted, toad cake was estimated to account for no more than twenty per cent of the Chinese (and probably Hong Kong) trade in Customs data. At the other extreme, government officials at the Ministry of Health stated that almost all of the Chinese, and probably Hong Kong and Singapore, imports represent toad cake. The quantity from these countries amounts to about eighty-four per cent of the total imports (Table 3).

Depending on which assessment is more accurate it is estimated that from 1979 to 1984, 711 to 3796 kg from China and 115 to 616 kg from Hong Kong actually represent bear gall bladder. On the other hand, all sources contacted felt that all imports listed from India and Nepal were bear gall bladder. Imports from North Korea, Taiwan, and the USA are also believed to be of bear gall bladder.

Wholesalers reported that while the dried gall bladder of Japanese Asiatic Black Bears weighs about 50 g, those obtained from the Himalayan/Tibetan region average twice that size and sometimes are as large as 120 g. Therefore, as a general rule about ten bears are needed to produce a kilogramme of gall bladder. Thus 7000 to 37 000 bears would be required to support the imports to Japan from China over the six years indicated. Likewise, over this period, the trade represents about 5000 bears from Nepal and India, with Hong Kong exports representing another 1000-6000 animals presumably originating in China or the Himalayan regions of India and Nepal.

Since Japan's Customs statistics do not identify the species from which the gall bladders are taken, it should be borne in mind that the Sloth Bear (*Melursus ursinus*) and a newly described, as yet unnamed, Nepalese species also occur in the Himalayan region.

The current wholesale price for imported bear gall bladder in Japan is approximately Y4000 (US\$16) a gram. At one large Tokyo wholesaler, for example, TRAFFIC (Japan) was shown a 76-g bear gall bladder from an Asiatic Black Bear imported from Nepal last year, priced at Y300 000 (US\$1200). The same gall bladder will retail for approximately Y500 000 (US\$2000).

Most Japanese importers of bear gall bladder are located in Osaka. Chinese bear gall bladder can be obtained at the spring and autumn trade fairs held each year in Shanghai and Canton, but most of the Chinese

**Table 3**  
**Bear Gall Bladder and Toad Cake Exports to Japan**

Country of Export	Year & Volumes (Kg)						
	'79	'80	'81	'82	'83	'84	Total
China	882	833	647	797	859	727	4745
Hong Kong	39	68	87	262	227	88	771
India	169	150	74	81	40	10	524
Nepal	139	340	-	-	-	10	489
N. Korea	9	10	-	-	-	-	19
Singapore	10	-	-	-	-	60	70
Taiwan	-	-	-	-	-	4	4
USA	2	-	-	-	-	-	2
Total:	1250	1401	808	1140	1126	899	6624

Source: Japanese Customs Statistics



trade comes to Japan via Hong Kong, which also acts as an intermediary for bear gall bladder of Nepalese and Indian origin.

#### Bear paw cuisine popular in Japan

In the mid-1970s, the popularity of bear paw dishes at Chinese restaurants experienced a sudden boom throughout Japan and they became widely available even at second class establishments. Today the dish, which takes about three days to prepare, is only found on the menus of the more exclusive Chinese restaurants. Since fewer than five restaurants in all of China now serve the dish, Japanese sources claim that bear paw cuisine is now more easily obtained in Japan. However bear paw cuisine is also offered at many Chinese restaurants in Hong Kong, Taiwan and Singapore.

In September 1983, a 300-kg shipment of bear paws representing ninety animals was imported by an Osaka company, Koji Boeki, from the Hei Long Jiang Province Food Export Co-op. The shipment was publicized in the Japanese press as the "last" to be received because hunting restrictions were soon to be imposed in Hei Long Jiang Province, but this information has yet to be substantiated. Since 1976 the Osaka firm has received regular shipments from the north-east Chinese province, totalling approximately 200 kg annually. At least one other Japanese company located in Tokyo has been identified as importing even larger volumes of bear paws from China each year. Wholesalers contacted by TRAFFIC (Japan) estimated that seven or eight years ago, more than a tonne of bear paws was received annually from China, but that trade in recent years has remained around 500 to 600 kg. Most of the shipments enter Japan through the ports of Kobe or Yokohama.

The value of the paws increases greatly through the distribution process. Japanese importers pay approximately ¥18 000 (US\$75) a kg for Chinese bear paws, which are packaged in ten-kilogramme or twenty-kilogramme boxes. Importers sell the paws to wholesalers for about ¥20 000-30 000 (US\$83-125) a piece. Restaurants purchase bear paws for about ¥45 000 (US\$188), which are prepared and served as meat and soup for ¥100 000-200 000 (US\$416-833) a plate.

Although paws from any bear species can be used in the cuisine, both importers and restaurant managers contacted confirmed that Japanese bears are seldom used because of competition with the domestic taxidermy industry which requires the entire animal with paws intact for stuffing. Therefore, the trade seems to be almost totally dependent on Chinese imports.

Shipments from China rarely, if ever, note the species on the packaging or the export documents, which complicates the situation as far as CITES is concerned. In addition to the Asiatic Black Bear and two Brown Bear subspecies previously mentioned, the Malayan Sun Bear (*Helarctos malayanus*), also indigenous to China, is listed on Appendix I of CITES. However, other Chinese populations of *Ursus arctos arctos* are not affected by CITES controls. For example, since there was not a Chinese CITES export permit with the 300-kg shipment mentioned above, importation was allowed by Kobe Customs on the basis that the paws originated from the Hei Long Jiang population of *U. a. arctos* which is not listed by CITES. However, it should be noted that populations of the Appendix I Asiatic Black Bear are also found in the same Province.

#### Conclusion

As the information in this review indicates, there is a considerable demand for bears in Asia. Japan has a large import trade in bear gall bladder and a more limited trade in bear paws as an exotic food item. China, in particular, and Hong Kong, India and Nepal are central to these

trades, which are seemingly conducted without any regard for CITES controls.

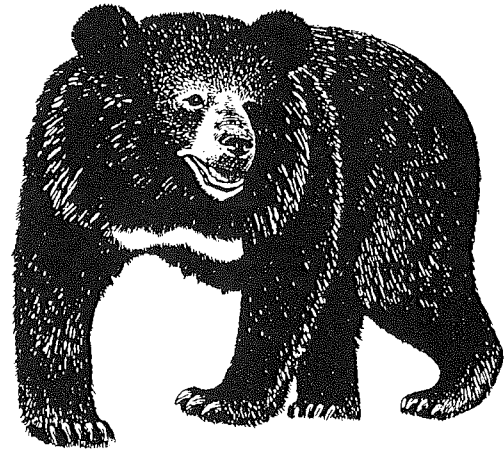
S. Korea is a major market for bear gall bladder, but as a non-Party to CITES, it conducts an uninhibited wildlife trade which seems to be increasing as a result of its economic prosperity. Exports of Japanese Asiatic Black Bears to S. Korea have grown considerably since 1980, a trade which TRAFFIC (Japan) believes to be in violation of CITES controls. The S. Korean trade is not focused on Japanese bears alone. An increase in bear poaching in the USA, for example, has been directly linked to the S. Korean demand for bear gall bladder.

Bear gall bladders are not only used in Japan and S. Korea but also in traditional medicine within China and throughout South-East Asia. In the absence of strict government regulation, there is a paucity of trade data and the scale of this trade is unknown.

There are few accurate recent population data with which to assess the status of the Asiatic Black Bear throughout most of its range. Where precise figures are available, as for the S. Korean population, the species is critically endangered. In the face of the substantial unregulated trade now occurring, the transfer of the Asiatic Black Bear to Appendix II seems unwarranted.

#### Acknowledgements

TRAFFIC (Japan) researchers included Celia Farnon, Naoko Funahashi, Keiko Sato and Cecilia Song. Special thanks to Mr Oh of the Korean Society for the Protection of Wild Animals for providing a detailed report on the situation in S. Korea.



Asiatic Black Bear  
(*Selenarctos thibetanus*)

#### **... Alaskan Bears Threatened Too**

The Alaska State Game Board has banned hunting of bears and the sale of bear gall bladders and paws.

According to Sterling Miller, a biologist for the Fish & Game Department who wrote the new regulation, bear gall bladders and paws are sold openly in Anchorage and other parts of Alaska, where buyers offer thousands of dollars for these products. This gives hunters a financial incentive to shoot any bear, whatever its size. Bears have such a low rate of reproduction, that indiscriminate hunting could become a problem.

The three bears which occur in Alaska are the Brown Bear (*Ursus arctos*), the American Black Bear (*U. americanus*) and the Polar Bear (*U. maritimus*), although the latter is not believed to be hunted for its gall bladder or paws.

Source: The New York Times, 9.12.84

## Stony Corals: a Case for CITES

by Susan M. Wells

In 1981, the *Traffic Bulletin* published an article (Wells, 1981) on the coral trade in the Philippines, at a time when the plight of the Philippine reefs had been highlighted by the fourth International Coral Reef Congress held in Manila. The article concluded that a ban on the stony coral trade was probably the only feasible way of preventing serious damage to the reefs, but emphasised that until public awareness of the problem increased and enforcement of existing controls improved, there was little hope of such a ban being effective. This year corals will again be in the news. The fifth International Coral Reef Congress takes place in Tahiti, and a proposal to add stony corals to Appendix II of CITES will be made at the fifth meeting of the Conference of the Parties to CITES. It therefore seems appropriate to review the current trade and the measures that are being taken to control it.

Stony corals are found throughout the Indo-Pacific and Caribbean, between latitudes 30°N and 30°S. They are colonial animals which secrete an external skeleton of limestone; the accumulation of dead corals and constant growth of new corals leads to the growth of the reef which provides a habitat for a vast number of other animals and plants. Most corals thrive only in water temperatures of 25-29°C. High light intensity is required by the symbiotic algae which live within the coral tissues and this restricts coral growth to water shallower than 30 m in the clearest seas and even shallower in turbid areas. Corals are also characterized by their slow growth rates. Massive corals such as *Platygyra* and *Montastrea* have rates of between 4 and 20 mm a year. The fastest growing species are the branching *Acropora* which average about 100 mm a year. However, although such figures give some indication of the rates of coral regeneration, research indicates that the full potential of coral growth is not necessarily realised and that reef regeneration may be heavily influenced by other factors such as storms and pollution (Buddermeier & Kinzie, 1976).

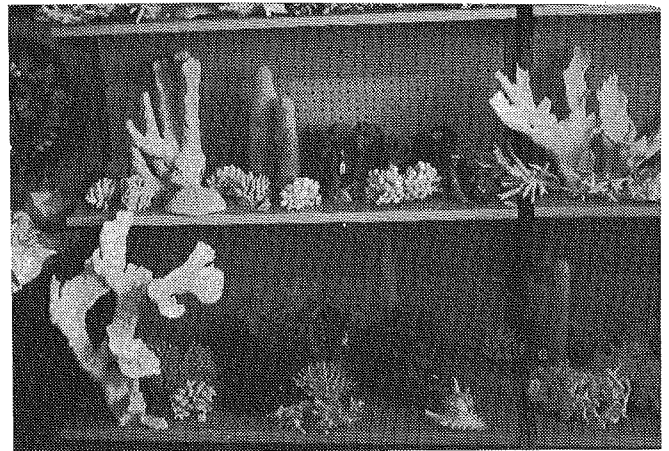
Stony corals have been used locally as a building material, for road construction, for the production of lime, calcium carbide and cement, and a variety of other industrial purposes in the Philippines, Sri Lanka, Malaysia, India, Indonesia, Brazil, the Maldives and probably many other countries. The slow-growing massive corals such as *Porites*, *Favia*, *Favites*, *Leptastrea* and *Platygyra* are generally used for these purposes. In the Yemen stony corals are collected by expatriates to decorate their houses. The local people collect *Tubipora* which is crushed and sold in spice shops (purpose unknown) (Perkins, *in litt.*).

With the growth of tourism, the marine curio trade has increased rapidly. Reports are usually anecdotal but small coral colonies are collected for sale as souvenirs in most countries where reefs occur such as Kenya, Philippines, Seychelles, British Virgin Islands, and Sri Lanka. The ornamental coral trade makes use of small colonies of branching species. In Guam, *Acropora*, *Fungia*, *Heliopora* and *Tubipora* are collected for sale as souvenirs (Hedlund, 1977). In Oahu, Hawaii, *Pocillopora* and *Tubipora* are collected for sale to tourists (Johannes, 1978). In Puerto Rico, local corals were collected and sold for souvenirs (*Acropora*, *Diploria*, *Colpophyllia* and *Meandrina*) until legislation was brought in to prohibit this (Sadovy, *in litt.*). In Jamaica, stony coral was collected in large quantities on the north coast in 1978. In Western Australia small colonies of *Acropora*, *Stylophora*, *Pocillopora*, and some faviid corals are collected for sale as souvenirs (Walker, *in litt.*).

In Queensland, the Great Barrier Reef Marine Park Authority is carrying out a study of the trade. In 1983, twelve licensed collectors were actively harvesting coral from the Great Barrier Reef, the two principal collectors accounting for over sixty per cent of the harvest.

Collecting activities are concentrated around Townsville and Cairns where eighty-four per cent of the total annual harvest comes from. About 44 tonnes (t) are collected a year, most of which is sold locally as souvenirs, often made up into gift articles. Small quantities of aquarium specimens are also taken. *Pocillopora damicornis* accounts for over seventy per cent of the total harvest; *Fungia* and *Acropora* are the second most popular varieties. Collection methods and financial and marketing aspects of this industry are described by Oliver (1984).

In addition to local trade, stony corals are imported into many countries for sale as souvenirs, for decorating fish tanks and to use for displaying jewellery etc. Unfortunately trade statistics for corals alone are rarely available as corals are often put in the same commodity category, for Customs statistics, as ornamental shells. Furthermore it is not always possible to say whether the statistics refer to stony corals or to precious (red) and semi-precious (black) corals, or to all types.



Pillar Coral (*Dendrogyra cylindrus*)

© Susan M. Wells

Despite a ban on the collection and export of stony corals in 1977, the Philippines is still the main supplier. Extrapolating from the US import data, exports from the Philippines have decreased since 1976 when they totalled 1800 t; in 1983, only 240 t were exported to the USA. McManus (1980) provides an overview of the entire coral collection and export process, and Wells (1982) describes the trade taking place in 1981. Commercial collection takes place in the waters of eastern Cebu, and Ross (1984) describes the coral fishery in this area. About twenty-eight species in seventeen genera are commonly collected and are exported via Cebu and Manila to a wide variety of countries.

Other exporting countries are involved to a lesser extent. A detailed analysis is not possible owing to a lack of statistics, but a few examples are given. Indonesian exports have varied from 40 t in 1976, to at least 119 t (to USA) in 1984. US imports in 1984 included 23 t from Singapore (which may have included Singapore's re-exports), 18 t from Malaysia and 15 t from Taiwan. Thailand reported a total export of 25 t in 1976, but only 100 kg in 1983, although the US recorded imports from Thailand of 3292 kg in 1983. Hong Kong imported 38 t from Malaysia in 1981 and 27 t in 1982. Other exporters over the last ten years have included India, South Africa, Maldives, Tanzania, Kenya and Kuwait. The only Pacific country which exports large quantities is New Caledonia (62 t exported to the USA in 1983 and 15 t in 1984). In the Caribbean, Haiti exports corals to the USA (11.5 t in 1978, 3 t in 1980; 2148 kg in 1983; 950 kg in 1984); large quantities are collected in the Bay of Gonave and near Port au Prince, but other areas are also reportedly involved. Collection has been heavy in the past in the Bahamas and small quantities (12 kg in 1984)

are still exported to the USA. The Cayman Islands have also been involved in the trade.

As may be clear from the above, the USA is the main importer. Total imports of raw coral average about 400 t a year (see Fig. 1) and 1984 could be a record year with 504 t imported in the period Jan-Oct. The main supplier is the Philippines despite the fact that corals are listed under the US Lacey Act which prohibits the import of products illegally exported from their country of origin. Imports into the USA from the Philippines were 340 t in 1982, 244 t in 1983 and for the period Jan - Oct 1984, 306 t. According to US Customs information, Philippine raw coral imported in 1982 entered the USA at ports not officially designated to clear commercial wildlife shipments, and all shipments of raw coral from the Philippines that year were imported directly from that country. US Fish and Wildlife Service officials seized two shipments of worked or live coral imports in 1982 (Anon., 1984) and three shipments of raw coral (USFWS, *in litt.*). Shipments are often labelled as 'Philippine shellcraft'. Corals are also imported from a number of other countries where collection or export is illegal including Haiti and New Caledonia.

Many European countries import illegally-collected Philippine corals. The UK imports an unknown quantity but a survey of marine curio retailers, carried out by the Marine Conservation Society in 1984, has revealed that over fifty per cent of these businesses sell ornamental corals as well as shells (Wells, 1984). South Africa imports corals mainly from the Philippines but also from Micronesia, for sale as souvenirs in coastal resorts (Cobb, *in litt.*). Taiwan also imports from the Philippines: 3.5 t in 1980 and 7.5 t in 1981 (type of coral not specified). Puerto Rico occasionally imports Caribbean corals from Florida, but more frequently Indo-Pacific corals are imported for sale as marine curios (Sadovy, *in litt.*). In Mexico, corals, mainly varieties from the Indo-Pacific, are sold in some of the major resorts.

Australian Customs statistics have a single commodity category for corals and shells. Imports are not known to be regular but in the past considerable quantities were imported from the Philippines (Oliver, 1984). In the period July 1983 - June 1984, 131 495 kg of corals and shells were imported from the Philippines, 17 496 from India, 11 924 kg from Haiti, 12 535 kg from Japan and smaller quantities from a variety of other countries. One Queensland collector exports small quantities (less than 150 kg) of worked coral souvenirs to Fiji, Vanuatu and Réunion.

Although there are few detailed scientific studies which demonstrate the effect of removal of stony coral from a reef, collecting over a long period may partially destroy a reef and have important economic consequences. Coral collecting and mining results in the removal of the living animals responsible for the formation of the reef. The loss of part of a reef reduces its resistance to wave action and increases the likelihood of storm damage. Ultimately, serious beach erosion may occur and fisheries dependent on reef species may disappear. Furthermore it will lead to deterioration of the aesthetic qualities of the reef which may affect tourism.

The Philippine reefs have suffered widespread damage from a variety of factors (Marine Sciences Center, 1979) and, in areas where coral collecting is intensive, reef deterioration has been accelerated. A study of a Philippine reef subject to commercial collecting showed that six of the more commonly collected species had undergone a decline in abundance by seventy-three per cent, and that there was a reduction in colony size range. Long-term collection of immature colonies may have accounted for the near absence of the coral *Seriatopora* in the fished area. The collection of small or immature colonies and the tendency to concentrate the collection in a few localized areas compound the effect. The long-term effect of this alteration of reef structure is not yet known but

TABLE 1  
Protection Status

<u>Australia:</u>	corals may be collected on the Great Barrier Reef only in licensed areas.
<u>Bahamas:</u>	collection of marine curios by Bahamians is permitted provided SCUBA gear is not used but collection and export of any marine products by non-Bahamians are prohibited. New fishery regulations are currently being drafted; it will be illegal to uproot, destroy or sell any hard or soft corals without the written permission of the Minister responsible for the regulations.
<u>Bermuda:</u>	stony corals are protected within territorial waters.
<u>Cayman Islands:</u>	collection of corals is illegal.
<u>Dominican Republic:</u>	the sale of stony coral is controlled.
<u>Egypt:</u>	taking of corals is prohibited along part of the Sinai coast.
<u>Guam:</u>	live coral may not be removed from depths of less than 10 fathoms and corals may only be collected with an appropriate permit (Hedlund, 1977).
<u>Haiti:</u>	coral collecting reportedly banned in 1976.
<u>Maldives:</u>	tourists are forbidden to collect corals.
<u>Netherlands Antilles:</u>	the collection of corals is prohibited.
<u>New Caledonia:</u>	coral collection prohibited in a protected zone extending 1000 m seawards from high water mark, around coast of most islands; but some limited exploitation may be permitted.
<u>Philippines:</u>	Presidential Decree (P.D.) 1219 of 1977 bans all collection and export of ordinary or hermatypic corals in the Philippines. In 1980, P.D. 1698 limited "experimental" collection of precious and semi-precious corals to only one person/corporation at a time. In addition, the possession and transport of ordinary corals was banned.
<u>Puerto Rico:</u>	since October 1979, extraction of corals within Puerto Rican waters has been forbidden except for scientific, educational and some commercial purposes. Although these laws are rarely enforced, since the regulations came into effect, extraction of local corals has decreased markedly.
<u>South Africa:</u>	coral may only be collected under licence and only for scientific purposes.
<u>Sudan:</u>	collecting of corals is prohibited.
<u>USA:</u>	in 1982 corals were included under the Lacey Act which prohibits the import into the USA of wildlife or products illegally killed or collected in, or exported from another country.

it has been found that there is a positive correlation between fish standing biomass and the proportion of coral cover (Carpenter et al., 1981). The ecological effects of commercial coral collection may therefore be found to be proportional to the reef coverage of harvested species (Ross, 1984). Reefs have been reported to have been damaged by coral collecting in other countries including Haiti, Bahamas (especially Rose Island and Cay Sal Bank) and Sri Lanka.

In some cases, coral collection could directly threaten a species. Six species of stony coral (*Acropora palmata*, *A. cervicornis*, *A. prolifera*, *Dendrogyra cylindrus*, *Mussa angulosa* and *Eusmilia fastigiata*) have been identified as endangered by the Florida Committee on Rare and Endangered Plants and Animals and a further nine species have been identified as threatened. Complete protection of these species is recommended (Franz, 1982), and *D. cylindrus* was recommended for listing on the US Endangered Species Act although no action has yet been taken. However, some of these species are on sale in Florida in large quantities, particularly *D. cylindrus* the Pillar Coral.

In the long term, coral resources could probably support an appropriately managed harvest. Wells and Alcala (in press) give detailed recommendations which include the licensing of commercial collectors and the monitoring of collecting areas and of the trade. Ross (1984) discusses the potential for management of stony corals on a sustainable yield basis using as an example one of the commercially important species in the Philippines, and Grigg (1984) proposes a management strategy based on a method devised for the precious coral fishery in Hawaii. It was estimated that for the maximum sustained yield of the stony coral *Pocillopora verrucosa*, the minimum size for harvest should be 18 cm height which, in this species, is reached at six years. "Farming" of stony corals is being investigated experimentally (Auberson, 1982).

Since techniques for sustainable use are not yet available, there is an urgent need for some form of curb on the trade. A total ban on the ornamental coral trade has been recommended on several occasions (for example at the 1979 Pacific Science Congress), re-iterated by Gomez (1982/1983), and Wells and Alcala (in press) recommend the cessation of the stony coral trade until such time as sustainable methods of utilization are devised. However, such a scheme would probably prove almost impossible to enforce. A number of countries have legislation controlling exploitation (Table 1) but this is almost invariably poorly enforced. The listing of stony corals on Appendix II of CITES would provide international support for such efforts. The most commonly traded genera have been proposed. Listing of corals would also permit some monitoring of the trade which is currently impossible due to the lack of trade statistics.

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## South Africa's Ivory Carving Industry

by E. Martin

Britain imported over 200 tonnes (t) of raw ivory annually during the first half of the nineteenth century and, from 1850 to 1900, more than 500 t yearly (Parker, 1979). Much of this ivory came from East Africa where the elephant populations were so great that their overall numbers were little affected by the hunting. South Africa supplied part of the remainder, but here it was another story. Boer and British traders eliminated herd after herd of the elephants in the open, tsetse-free regions where they roamed. They also taught Africans to use firearms and organized them into hunting expeditions numbering a hundred or more men. It was relatively easy to transport the tusks in oxen caravans, and regularly-scheduled steamships took the ivory to European destinations.

South Africa had a smaller population of elephants than East Africa, and by 1900 they were on the verge of extinction. It has been estimated that the almost impenetrable scrub of Addo held about 100 at that time; Knysna Forest had forty to fifty; Tongaland might have had a few, wandering back and forth across the Mozambique border (Hall-Martin, 1980). Where Kruger Park stands today, under 100 survived.

It is therefore not surprising that there was no ivory carving industry in South Africa during the first part of this century. Even when Kruger Park started culling elephant in 1967, there was not much demand for the raw ivory locally, although by that time international tourism to South Africa had boomed, and curio shops in Johannesburg, Cape Town and Durban were importing ivory items from other African countries, Hong Kong and India for sale to tourists.

John Ilsley, who set up Bushcraft Trading Company in 1970 as the Johannesburg office for Botswana Game Industries (B.G.I.), exported to Hong Kong raw ivory from South West Africa/Namibia, Mozambique, Botswana, Angola and Zimbabwe. During the following years, he dealt with 12-14 t of raw ivory annually, and he learnt that considerable quantities of African ivory carvings were coming every year into South Africa from Zaire, Zambia and Zimbabwe. When he bought Bushcraft from B.G.I. in 1975, he expanded the business and set up his own carving industry to use some of the available raw ivory. He established a factory at Lebowa, near Pietersburg in the northern Transvaal, to take advantage of the Government's offer to encourage new industries in the African homelands. In March 1976, he had seven Zimbabweans with several years' experience in working ivory train nine Lebowa employees to make ivory bracelets and beads on lathes. Sales boomed and he soon increased his Lebowa workforce, choosing more Lebowans, on the basis of their ability to draw, to take the place of the Zimbabweans who returned home.

In July 1976 a second firm, Superior Rocks and Gems, in Johannesburg, began producing ivory commodities. This company was originally set up by a German plumber to carve African animals from verdite. When Cyril Pearce and the brothers, Hugh and Richard Bladen, took control of the firm, they set up a factory in Rosslyn, just north of Pretoria, with the idea of branching out into making jewellery using not only verdite but also ivory. Since the African employees had learned to carve verdite, it was not difficult for them to learn to work ivory, and soon they were also carving small animal statues in ivory.

In the same year, Mauro Pelletti began making highly personalised ivory jewellery; his business became M.G. Ivory, with headquarters and factory in Johannesburg, and by 1980 was consuming 400 kg of raw ivory a year.

In 1977, R. Waizenegger, a founder of Haglund Limited, started making ivory pendants. He gradually increased the amount of ivory he used annually, from 15 to 30 kg by 1982, which was small compared with the

other jewellery and carving manufacturers based in central Johannesburg.

In Cape Town during the late 1970s there were several small, family-owned jewellery businesses that used a little ivory, but the only one to become important was Aurea Design. This started in 1978, using 50 kg of raw ivory and by 1982 had increased its consumption to over 100 kg a year.



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The two pioneering ivory manufacturers, Bushcraft and Superior Rocks and Gems, are now South Africa's largest (see postscript). Bushcraft has ten ivory carvers, eight ivory craftsmen, ten bead-makers, three bangle-makers, one scrimshaw artist, fifteen polishers and five silversmiths. The carvers are the highest skilled of these workers, and their average weekly income is between US\$120 and US\$180. In contrast to many African wage-earners in the South African homelands, they are very well paid.

The Bushcraft factory produces a wide range of ivory jewellery as well as cigarette lighters, salt and pepper shakers, napkin rings, carved whole tusks and sculptures of African tribal heads and numerous animals. The most profitable of these are the animals (elephants, rhinos, buffalos, hippos, warthogs, crocodiles, etc.), individually carved and unlike any imports from India or Hong Kong. From mid-1982 to mid-1983, Bushcraft converted 3.6 t of raw ivory into ivory items.

In 1983 the Superior Rocks and Gems factory was employing five ivory carvers and was consuming 2 t of raw ivory a year, 500 kg more than in 1980 and 1981, but still considerably less than Bushcraft. A German artist there designs his own jewellery and carves the ivory for it himself, and a Shangaan from the north-east Transvaal, specialises in carving lions. These lions are masterpieces. It takes three full days to carve an eight-centimetre lion, and two more days to polish it, and each one is signed by the carver, Lucas Khoza. They retail for \$750. In my opinion, Khoza's work is the finest in southern Africa. However, he does not make many lions, and the mainstay of Superior Rocks and Gems is the production of jewellery and various African animals.

Besides the carvers, this factory employs two cutters of raw ivory, one grinder, five sandpaperers and two polishers. The cutters and grinders earn about \$85 a week, and the polishers \$41. In addition, there are administrative staff and other employees who package the finished carvings and jewellery and transport them to



market. Most of these people come from nearby Bophuthatswana, but several are South Africans.

M.G. Ivory's use of raw ivory has declined sharply from 400 kg in 1980 to only 80 kg in 1982. Only two employees now work ivory, compared with six in 1980. However, Mr Pelletti is contemplating entering the market for Japanese ivory seals and there may be an upward trend again. Although the economic recession in South Africa has hurt M.G. Ivory, the main reason for the company's reduced ivory consumption is that it has become more specialised in the production of expensive, individualised pieces of ivory jewellery set in gold. The firm has practically stopped making small ivory trinkets, which Mr Pelletti believes are less popular now, due to the adverse publicity on killing elephants for the ivory trade.

Haglund Limited employs three ivory craftsmen and has also felt the recession which has reduced its turnover in ivory products. However, it has a much more serious problem now as it has recently been buying cheaper ivory from Namibia. This ivory has been found to be liable to cracking and splitting as a result of coming from the semi-humid northern part of the country and being transported to the drier climate of Windhoek for sale. Not only does the Namibian ivory crack easily when being worked, but it also does so sometimes much later in the showrooms and shops under bright display lights. Customers are returning some of the pieces to Haglund for repair, and this is an expensive undertaking. The company's speciality is still pendants; these are made from thin ivory plates on which Bushman designs of animals or people are cut out, mounted on a vermeil or silver frame.

Aurea Design now has eight people working full-time in the production of ivory jewellery. The manager is hoping to market carved heads, but bangles, bracelets, necklaces, brooches and earrings will remain the most important items. Their distinctive feature is a high polish achieved by a 'secret ingredient' which gives them a very glossy appearance, and it is this, the owner believes, that attracts most buyers.



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Today however, South Africans rarely patronise the curio shops that sell ivory jewellery and trinkets. They prefer up-to-date fashion jewellery of European and American design. Conservationists who have written about the decline of some elephant populations in Africa have further dampened the demand for ivory jewellery.

At least ninety per cent of all the ivory jewellery and carvings sold in South Africa are now bought by foreign tourists, especially Americans, but the British, Germans, Japanese, Italians, Spanish, and Taiwanese also purchase considerable amounts.

Since South Africa has developed its own ivory industry, fewer ivory items are imported, although some are smuggled in from Zimbabwe. These are sold at very reduced prices by Zimbabweans eager for foreign exchange (Martin, 1984). As a result, most of the illegally imported ivory commodities on sale in shops in South Africa are of Zimbabwean origin. They are of a high quality, and the Zimbabweans make certain items which South Africans do not, such as chess sets. Furthermore, their tribal head carvings are generally considered the best.

Johannesburg has the greatest concentration of curio shops selling ivory items in South Africa, but there are also many shops in Durban, Cape Town and Kruger Park. Hundreds of curio shops in South Africa cater for tourists. In addition to South African and Zimbabwean ivory carvings, there are cheaper lines of jewellery and concentric balls legally imported from Hong Kong, plus a small quantity of items made in Botswana, Zambia, Zaire and Malawi.

The prevalence of ivory jewellery and carvings for sale in South Africa has resulted in some displays of protest. In May 1983, half a dozen ivory shops in Cape Town were daubed with slogans such as 'Ivory kills Elephants'. Responsibility was claimed by the Animal Rights Movement, who also stated that South Africa was the 'gateway' for the illegal ivory trade.

This point has repeatedly been raised in the South African press. Some conservationists and some journalists believe that huge amounts of illegal ivory pass through Jan Smuts airport. As evidence, they cite the difference between raw ivory imports and exports given in South African Customs statistics. For example, the official value of raw ivory imports in 1982, according to the Customs Department, was US\$278 480 while exports of raw ivory amounted to US\$2 226 952. Moreover, the main source for ivory in South Africa is Kruger Park, yet the ivory sold from there in that year went directly to the South African carving industries for their own use.

In fact, while large exports of raw ivory from South Africa did not start this century until 1978, the total exports from 1973 to 1982 are estimated to have been 283 t and over the same ten-year period imports were only 47 t. This shows an even greater discrepancy, but it is incorrect to assume that the difference comes mainly from illegal sources and is smuggled into South Africa for re-export. South Africa is officially a party to a Customs Union which, in its present form, dates from an agreement in 1969 and allows free movement of goods between South Africa, Namibia, Botswana, Lesotho and Swaziland. Therefore, when Botswana for example (which has about 25 000 elephants and is the largest source of ivory in the Union), wishes to export raw ivory, it sends its consignment to Jan Smuts in Johannesburg because its own airport lacks facilities for large jets. That consignment could then leave South Africa with an export permit from the Transvaal Nature Conservation Division, and the amount of ivory would be noted in the South African Customs statistics as South African, not Botswana ivory. Possibly the main reason for the discrepancy in the figures, was the policy of the Department of Nature Conservation to issue import licences which did not indicate the country of origin. Hence, ivory legally obtained in Zambia, Malawi and Tanzania was re-exported as South African ivory. However, towards the end of 1982, the South African Government adopted the CITES ivory marking principles (CITES Resolution Conf. 3.12) which require the name of the original source country of the raw ivory on export permits. Unfortunately, all ivory in stock at that time was stamped as South African regardless of its origin (Ilsley, pers. comm.).

South African Raw Ivory Imports and Exports  
1906-1982

Year	Quantity (kg)		Value (US\$)		Year	Quantity (kg)		Value (US\$)	
	Exports	Imports	Exports	Imports		Exports	Imports	Exports	Imports
1906	1209		4362		1935	181	0	350	0
1907	2258		11598		1936	543	20	990	75
1908	3542		18781		1937	25	63	39	222
1909	3609		18148		1938	394	12	615	10
1910	1439		5657		1939	247	0	564	0
1911	1274		4662		1940-1943	0	0	0	0
1912	485		1378		1944	45	0	298	
1913	613		2079		1945	847	251	3083	1394
1914	297	74	1022	360	1946	352	490	2180	5348
1915	249	67	1006	152	1947-1963	0	0	0	0
1916	694	819	1540	1798	1964	16828	0	8578	0
1917	133	0	351	0	1965	2586	181	12639	826
1918	266	23	458	47	1966	16965	635	86335	3727
1919	955	655	4287	2851	1967	4899	136	26739	317
1920	2133	557	8924	1952	1968	3039	272	8004	1008
1921	1330	49	4644	146	1969	614	0	3116	0
1922	829	212	2759	1056	1970	15822	785	85650	4711
1923	1199	151	3929	629	1971	7309	1560	48164	11353
1924	676	0	2614	0	1972	21100	3400	198708	26845
1925	846	0	2479	0	1973	15996 *	2600	406128	314085
1926	436	84	1720	316	1974	8690 *	500	235760	7408
1927	1480	152	5758	729	1975	17990 *	600	509297	9803
1928	1266	0	5114	0	1976	8796 *	3300	279541	24688
1929	1470	0	7985	0	1977	10073 *	3712 ?	388424	143147
1930	1009	0	2747	0	1978	29876 *	14900	1954480	608594
1931	855	0	1374	0	1979	43817 *	9800	3015454	304716
1932	372	66	327	64	1980	37848 *	1300	2375722	72156
1933	0	32	0	86	1981	52767 *	1800	2443118	96666
1934	177	11	335	80	1982	56767 *	8100	2226952	278480

From 1906 to 1963, raw ivory exports from South Africa are "South African produce" only.

\* Calculated by dividing the total value of ivory exports for that year by the world market price for soft raw ivory.

Sources: Official statistics mainly compiled by the South African Department of Customs and Excise: Annual Statement of the Trade and Shipping of the Colonies and Territories forming the South African Customs Union, 1906-1909; Annual Statement of the Trade and Shipping of the Union of South Africa, and of Southern and N.W. Rhodesia, 1910-1912; Annual Statement of the Trade and Shipping of the Union of South Africa, and of Southern and Northern Rhodesia, 1913-1919; Annual Statement of the Trade and Shipping of the Union of South Africa, Southern and Northern Rhodesia, and South-West Africa, 1920-1929; Annual Statement of the Trade and Shipping of the Union of South Africa, 1930-1955; Foreign Trade Statistics, 1956-1980; Monthly Abstract of Trade Statistics, 1981-1982.

In the 1970s, considerable quantities of raw ivory originating in Angola were brought into Namibia legally without passing through Customs. They were imported through the town of Rundu on veterinary permits and were later granted export permits by the Transvaal authorities to be shipped overseas. Consequently, this ivory also appeared on Customs statistics as of South African origin. Customs officers are not allowed to open crates passing freely between member countries of the Customs Union, unless they suspect drugs or arms in their contents.

There is, of course, some ivory smuggled out of such countries as Zambia and Zaire into Botswana and Namibia that is not declared on entry. There is no import duty on raw ivory entering the Customs Union, so the member governments lose no revenue. This may explain why the Customs officers are not overly concerned when exporters later obtain permits for it, and the ivory subsequently is declared a South African export without having been previously declared through Customs as an import.

However, the amount of raw ivory illegally exported from Zambia, Zaire and Tanzania through the South

African Customs Union has probably been small as traders find it easier and more convenient to move illicit ivory into Burundi, the Central African Republic and the Sudan. Botswana and South Africa are further away and have many more border controls.

Even if sceptics refuse to accept that most of the ivory exported from South Africa comes from legitimate sources within the Customs Union, the total amounts to less than five per cent of the estimated 5796 t exported from Africa between 1976 and 1982 (Parker and Martin, 1982 and 1983). Thus, South Africa cannot be considered a major clearing house for illegal ivory.

The South African ivory industry itself annually consumes 6 t of raw ivory. Half of the 3.6 t used by Bushcraft comes from Kruger; the other half is imported from Zimbabwe, Zambia and, until a hunting ban there, from Botswana. The 2 t used by Superior Rocks and Gems came from Kruger, and some of the remaining 400 kg consumed by the smaller ivory businesses is also Kruger ivory. It has been the strict policy of the National Parks Board to sell Kruger ivory to the South African manufacturers on the condition that they only export it



after it has been carved, in order to maximize financial benefits to the country. Since the industry began in South Africa, all Kruger ivory has been sold to it, except some large trophy ivory sold by tender in November 1983 for export. From 1967 to 1980, 9044 elephants were culled (Hall-Martin, 1981). In addition, ivory collected from elephants dying of natural causes, and tusks confiscated from poachers, were put on the market by the Kruger authorities. All but the very large trophy tusks are sold at fixed prices.

In 1981 Kruger tusks under 15 kg were sold for US\$61 per kg. At that time, the world market price for 7.5-kg tusks of soft ivory was about US\$50 per kg; however, it had been US\$69 in 1979 (Parker and Martin, 1983), and the South African buyers considered the price fair. When the world market prices continued to fall and were only US\$40 per kg in 1983 for 7.5-kg tusks, Kruger also reduced its prices. In November 1983, tusks up to 1 kg were priced at US\$24 per kg; 1.1 to 10-kg tusks were US\$48 per kg; 10.1 to 20-kg tusks were US\$56 per kg; and tusks over 20 kg were US\$64 per kg. While Kruger ivory has remained somewhat more expensive than average world prices, the park is a consistent and reliable supplier of good ivory, and this ivory is actually advantageously priced for South African buyers. If they imported the ivory instead, they would have to provide the provincial government with precise documentation for each tusk. This is expensive, complicated and time-consuming although deemed necessary in order to prevent the import of illegal ivory.

Kruger Park's management has been exceptionally successful in increasing the elephant population from 135 elephants in 1931 to 6585 in 1967 and 7500 today, which represents 95% of all the elephants in South Africa. The question of how to maintain so many elephants has been endlessly debated. The authorities' solution is to cull surplus numbers in order to keep the population at 7500, believed to be the optimum number for the Park (Hall-Martin, 1980).

In selling the ivory to the South African carving industry, the Park is encouraging and supporting the use of ivory. Economically, the authorities see this as a benefit to the country.

The wholesale price of ivory items has to cover the cost of the raw material, labour and other expenses, and to produce a profit. In practice, this generally works out at three times the cost of the raw ivory. In some instances, however, companies have to account for very high labour charges. For example, much greater skill and time are required to produce a complicated animal sculpture than for a bangle which can be made on a machine. The price put on carvings by the retailer is about double the wholesale price. Thus 1 kg of worked ivory purchased by tourists earns South Africa US\$310 on average in foreign exchange, plus revenue from the sales tax imposed on it. When mounted with gold or silver it also earns a thirty per cent excise tax. Therefore, the 6 t of raw ivory consumed by the South African carving industry in 1982 was worth approximately US\$2 000 000 retail.

As of December 1983, when I completed the research for this article, it was difficult to oppose the argument in favour of the South African ivory industry. The irregularities that do exist are few, the greatest being the sale of worked ivory illegally brought in from Zimbabwe. The South African ivory manufacturers would like these imports stopped because they compete with their own products, and they have taken steps to discourage shops from buying them. They will not undertake the repair of such pieces and, in a few instances, have refused to sell their own work to shopkeepers who deal in illegal Zimbabwean carvings. The other irregularities result from the lack of control over non-dutiable raw ivory imports; these were to some extent rectified by the adoption of the CITES ivory marking principles at the end of 1982.

## Postscript

This article was written in 1984, on the basis of research completed at the end of 1983. Since then Superior Rocks and Gems has moved out of the ivory business (Ilsley, pers. comm.).

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\* \* \* \* \*

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## Carnivore Skins Held in Brazil

by José Carlos S. Duarte and George H. Rebêlo

This article is based on a census carried out between May and July 1982 on the number of carnivore skins taken illegally in Brazil, an analysis of caiman skins having been presented elsewhere (Rebêlo & Duarte, 1983). The census was designed to identify wildlife species hunted illegally in Brazil for their skins.

With the collaboration of the ex-director of the Department of National Parks and Equivalent Reserves, Maria Teresa Jorge Padua, and IBDF offices in Acre, Alagoas, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Pará, Paraíba, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia and Santa Catarina, the sample covered 14 states and territories, four of which have international borders. Five of these states are among the nine responsible for 95.6% of Brazil's exports and imports (FIBGE, 1982) and three of these states also have borders. The area represents forty-four per cent of the country and fifty-two per cent of states and territories (Fig. 1).

Commercial hunting and export have been prohibited in Brazil since 1967; skins are confiscated in routine operations at ports, airports, and borders, during special operations and after reports from members of the public. After confiscation, the skins are held in storage at the IBDF (Instituto Brasileiro de Desenvolvimento Florestal) offices and the dealers are prosecuted. Once the case has been taken to court and a judgement returned, the skins are destroyed. Skins have been confiscated since the export ban was enforced but the majority were seized in the last five years.

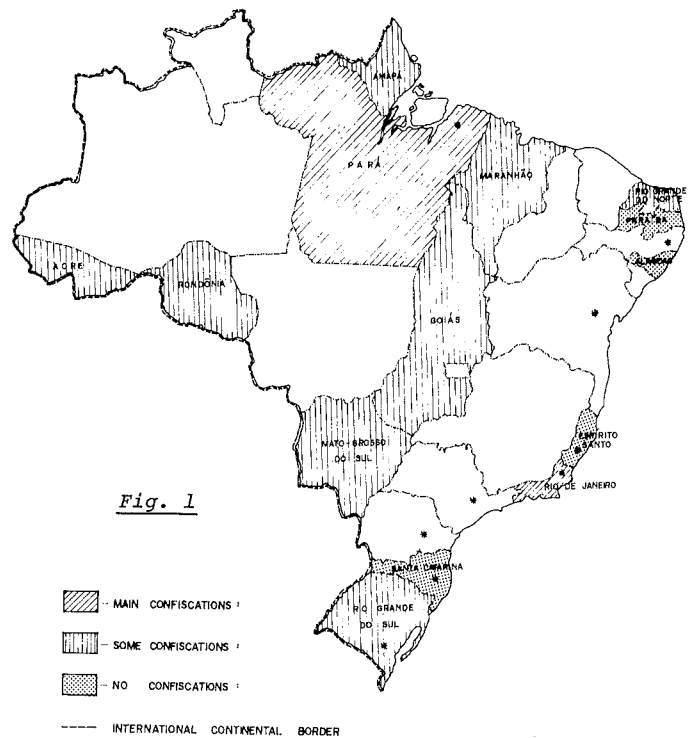
The information contained in this article should be treated with caution because not all IBDF's officers can correctly identify species.

Ninety per cent of the 34 915 mammal skins reported were in thirteen stores. Carnivores constituted seventy-seven per cent of the mammal skins. Stocks in Mato Grosso do Sul were destroyed shortly before the questionnaire was received there. Some replies came without scientific names, in which case we assigned specific names or included the species in a general category (e.g. *Felis* spp.).

The scientific nomenclature used follows Honacki *et al.* (1982).

TABLE I  
Confiscated Carnivore Skins held by IBDF Offices in 1982

	Number	Percent of total
CANIDAE		
<i>Dusicyon</i> spp.	25304	94.1
total:	25304	94.1
FELIDAE		
<i>Felis pardalis</i>	455	1.7
<i>Felis wiedii</i>	149	0.5
<i>Felis concolor</i>	10	0.0
<i>Felis</i> spp.	10	0.0
<i>Panthera onca</i>	247	0.9
total:	871	3.1
MUSTELIDAE		
<i>Lutra longicaudis</i>	547	2.0
<i>Pteronura brasiliensis</i>	154	0.6
<i>Eira barbara</i>	1	0.0
total:	702	2.6
PROCYONIDAE		
<i>Nasua nasua</i>	3	0.0
total:	3	0.0
Total:	26880	



### CANIDAE:

The uncertainty of identification makes it inadvisable to separate the dogs and foxes of genus *Dusicyon* (Hoary Fox (*D. vetulus*), Common Zorro (*D. thous*) and Pampas Fox (*D. gymnocercus*), the only canids in the sample. Together they represent ninety-four per cent of carnivore skins confiscated (Table 1). The majority were confiscated and deposited in Rio de Janeiro. Other offices reporting canids were Rio Grande do Norte, Rio Grande do Sul, Maranhão and Mato Grosso do Sul.

### FELIDAE:

Cat skins were reported from nine offices and accounted for about three per cent of carnivore skins reported. Ocelot (*Felis pardalis*) and Margay (*F. wiedii*) made up seventy per cent of cat skins and the rest were mainly Jaguar (*Panthera onca*). Almost sixty per cent of all cat skins and most Ocelot and Jaguar skins were reported from Rio de Janeiro, while the majority of Margay skins were from Pará. In the south of the Pantanal, confiscated skins are mainly Ocelot. Reports from Pará, Amapá, Acre, Rondônia, Maranhão and Goiás indicate that Ocelot and Margay are the species most commonly taken in Amazônia. Some unidentified skins from small spotted cats were reported by some offices and Puma (*F. concolor*) were reported from Goiás, Maranhão and Mato Grosso do Sul (Table 1).

### MUSTELIDAE:

Mustelids, mainly River otter (*Lutra longicaudis*) and Giant Otter (*Pteronura brasiliensis*), accounted for 2.6% of carnivore skins confiscated. *Lutra* skins were reported from Pará, Rio de Janeiro, Amapá and Maranhão, ninety-eight per cent coming from the first two states. Other *Lutra* skins in the sample represented about seventy-eight per cent of mustelid skins. The subspecies *L. longicaudis platensis* and *L. l. enudris* were not differentiated. Less than twenty-two per cent of mustelid skins were from Giant Otters and ninety-five per cent of those were found in Rio de Janeiro. One Tayra (*Eira barbara*) skin at Acre (Table 1) was the only other mustelid skin appearing in the census.

## PROCYONIDAE:

There was no evidence to suggest that commercial hunting of Procyonids exists in Brazil. Only three Southern Coati (*Nasua nasua*) skins were recorded, these being in the south of the Pantanal (Table 1).

## DISCUSSION AND CONCLUSIONS

It is known that each year a great number of skins leave the country illegally. The skins confiscated represent a sample of all species hunted, but the majority are of those which had been destined for commercial trade.

In Brazil, seven carnivores are considered by IBDF to be in danger of extinction (MA-IBDF, 1973): Maned Wolf (*Chrysocyon brachyurus*), Small-eared Zorro (*Dusicyon microtis*), Bush Dog (*Speothos venaticus*), Jaguar (*Panthera onca palustris*), Giant Otter (*Pteronura brasiliensis*), La Plata Otter (*Lutra longicaudis platensis*) and Amazon Weasel (*Mustela africana*).

If a relationship exists between the number of skins confiscated and the pressure of hunting, the census indicated that:

1. At least six carnivores - *Dusicyon* spp., *Lutra longicaudis*, *Pteronura brasiliensis*, *Felis pardalis*, *Felis wiedii* and *Panthera onca* - are suffering from considerable hunting pressure. Some of these are not currently considered endangered in Brazil.
2. During the last twenty years the Jaguar does not seem to have been the most heavily exploited cat in Amazonia, as it was during the 1950s and early 1960s, when more than 11 000 Jaguar skins were legally exported (Carvalho, 1967).
3. The Ocelot appears to be the most intensively hunted cat in the country, and the Margay is also widely taken.
4. Before hunting became illegal, the Giant Otter was the most exploited mustelid and between 1950 and 1965 more than 7500 hides were exported (Carvalho, 1967). The low number of Giant Otter hides now in trade could mean that the species is endangered.
5. *Lutra*, the least exploited mustelid in the 1950s and 1960s, is now the most commonly taken.

The situation with regard to fox and dog skins is less clear. While these animals, especially the Common Zorro, are considered common throughout the country, they were not known to be hunted intensively and we did not expect them to be the most common species in the sample. It is possible that the large representation results from the confiscation of a single large shipment and is not representative.

While the majority of carnivore skins are held at Rio de Janeiro, it is not known whether this is due to more efficient confiscation there, or because the volume of skins passing through that city is higher than the rest of the country.

We recommend that data on skins held by IBDF be extended to include all of the skin stores and export points within the country. It would also be useful to undertake a detailed analysis of confiscated skins, recording numbers and measurements. This should be compared to studies of the population structures of the hunted populations. It is hoped that the information on numbers of confiscated skins will be taken into account in the formulation of conservation plans for endangered species.

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## The Crocodilian Skin Trade:

### a Summary

The following summary has been extracted from "The Crocodile Skin Trade since 1979", a report compiled by Ginette Hemley and John Caldwell and published by TRAFFIC (USA), 1601 Connecticut Avenue NW, Washington, DC 20009, USA.

Since 1979 the international crocodile skin trade has involved primarily six species, and probably no more than 1.5 million skins have entered world commerce each year. At least three-quarters of the total volume of this trade has probably consisted of *Caiman crocodilus* skins. The Annual Reports of CITES Parties suggest that the overall trade tapered off slightly in 1982 from higher levels in 1980 and 1981. According to Japanese Customs data, however, crocodile skin imports into that country increased steadily until 1984. A new EEC Regulation, effective 1 January 1984, requires two other major consumers, Italy and France, to curtail imports of CITES

Appendix I crocodilians on which they had previously held reservations. CITES data show the following average minimum number of skins entering trade annually from 1980 to 1982: *Alligator mississippiensis* - 21 009; *Caiman crocodilus* - 664 789; *Crocodylus cataphractus* - 9610; *Crocodylus niloticus* - 27 064; *Crocodylus novaeguineae* - 25 624; *Crocodylus porosus* - 4442. These figures are incomplete, however, as some countries trading crocodile skins, such as Singapore, are not party to the Convention. In addition, some CITES members, especially among the producer nations, have not submitted Annual Reports, and others like France, report only a portion of their CITES trade.

It should be noted that a significant number of crocodilian skins are apparently entering trade illegally each year. For example, recent reports suggest that, despite protection, at least one million skins of *Caiman crocodilus* leave South America each year, primarily from Paraguay, Bolivia, and Brazil. In addition, some CITES Parties (e.g. Indonesia, Nigeria, Togo, and Zaïre) appear to be exporting skins of Appendix I crocodilians commercially although they have not entered reservations on those species.

## \* Snake Smuggler Fined

On 16 January 1985 the wildlife smuggling activities of Mr Johnny Renaldo Noordman, a fishmonger from Enschede in the Netherlands, were brought to an abrupt halt by officers of the Australian Customs Service. Noordman was arrested while trying to leave Australia on an Olympic Airways flight to Athens. Customs officers found eighteen reptiles concealed in his luggage. In addition to a number of Australian lizards and venomous snakes, the reptiles included four Children's Pythons (Liasis childreni) and four Diamond Pythons (Morelia spilota spilota) which are listed on Appendix II of CITES.

Under the Wildlife Protection Act, which regulates Australian international trade in wildlife, the export of native reptiles and most other native fauna for private or commercial purposes is banned.

Mr Noordman, who is a member of the Dutch Snake Society and the Netherlands Herpetological Society, Lacerta, claimed that he was unaware of Australian controls on wildlife trade but admitted that he was aware of CITES. Dutch CITES authorities, who responded quickly to an Australian request for information on Noordman's background, found two Australian Carpet Pythons Morelia spilota variegata at his home. He had, however, acquired these snakes prior to ratification of CITES by the Netherlands.

For the smuggling attempt in January, Noordman was prosecuted by the Australian Government. When he was brought to trial, his legal representative argued that the seven days spent in custody before bail was granted and Mr Noordman's enforced stay in Australia for a further six weeks prior to the trial, should be taken into account when Noordman was sentenced. The judge convicted Noordman and fined him A\$5000 for attempting to export Australian native fauna and attempting to export CITES Appendix II specimens. The reptiles were ordered forfeited to the Australian Government.

*Source:* Australian National Parks & Wildlife Service in litt. to TRAFFIC (Australia), (7.3.85).

## New Zealand Route for Smugglers

The New Zealand Wildlife Service has found evidence of Australian fauna, particularly parrots and reptiles, being smuggled out of Australia via New Zealand. Many of New Zealand's own unique wildlife species are also being smuggled out of the country. The service is reported to have evidence of foreign buyers in Singapore, the USA and western Europe sending 'shopping lists' to New Zealand dealers. The Tuatara (Sphenodon punctatus) is said to be high on the wanted list and there are fears that traders may also try to obtain specimens of the rare flightless parrot, the Kakapo (Strigops habroptilus).

*Source:* TRAFFIC (Australia)

## Errata

We apologise for three errors in our article on the European Trade in Kangaroo Products in Traffic Bulletin Vol. VI No. 5. The title of Table 3 should have been "State Quotas for Red, Western Grey and Eastern Grey Kangaroos and Euros, 1983-1984".

In Table 6, "Number" should read "kg", and the value of kangaroo meat exports to F.R. Germany should have been AU\$1 589 003.

## Security Stamps Stolen

The Management Authority of the Central African Republic has informed the CITES Secretariat of the theft of CITES Security Stamps numbered: CF 9117317 to CF 9118200. The last authentic permit of the Central African Republic bearing a CITES Security Stamp is permit No. 0028 CF 1985 granted on 12 February 1985.

Consequently, any permit of the Central African Republic, or any permit of any other country, bearing one of the above-mentioned stamps must be confiscated and sent, accompanied by all relevant information, to the appropriate Management Authority, via the CITES Secretariat, for investigation purposes. The specimens accompanied by any such permit must be seized or rejected.

From the permit number and date indicated above, and until further notice, the permits of the Central African Republic will not bear a CITES Security Stamp.

The Secretariat urges all the Parties to pay particular attention to this information and to inform the Secretariat of any suspect cases.

*Source:* CITES Secretariat Notification to the Parties No. 340.

\* \* \* \*

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