

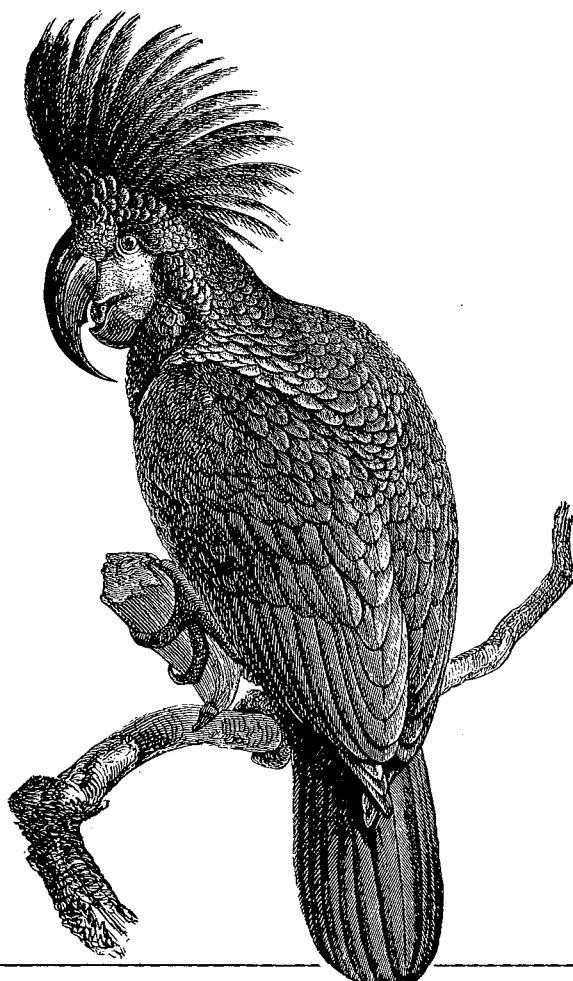


# Traffic Bulletin

The journal of the international TRAFFIC Network

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## Cuba, Brunei Darussalam and Guinea-Bissau in CITES

Cuba, Brunei Darussalam and Guinea-Bissau have acceded to CITES. These accessions became effective on 19 July, 2 August and 14 August 1990 respectively, and brings the total number of Parties to 109.

## Hong Kong Reservation on African Elephant Expires

The six-month reservation held by the UK on behalf of Hong Kong on the listing of the African Elephant *Loxodonta africana* in CITES Appendix I, expired on 17 July 1990.

From that date the Territory stopped all ivory exports, with the exception of worked ivory personal effects. Hong Kong residents may export up to 5kg of worked ivory personal effects, and import up to 1 kg of worked ivory, without a licence. Visitors may only take out ivory if they have a valid Hong Kong export licence; these will only be issued if the country of import has already issued an import licence.

Possession licences are required for all persons holding in excess of 5 kg ivory (worked or raw) in Hong Kong, which goes beyond the requirements of CITES. As at 7 July 1990, a total of 879 possession licences had been issued to holders of commercial ivory stocks. No figures are available for the same period last year since traders have only been required to have possession licences since 12 January 1990.

Several large shipments of worked ivory have left Hong Kong without export licences in recent months (see page 55) and a number of ivory seizures carried out between June 1989 and March 1990 are listed on page 71.

*Source: WWF-Hong Kong/Hansard, 9 July 1990*

## Taiwan Burns Ivory Stocks

In a demonstration of its resolve to curtail the illegal trade in wildlife, the Government of Taiwan has followed Kenya's example (see *Traffic Bulletin*, 11(1):2) and destroyed its stocks of confiscated ivory.

On 21/22 May 1990, at Nan Jung public cemetery in Keelung, near Taipei, 700 kg of ivory and 11 cat skins, valued at US\$3.6M, were burned by Government officials.

Although Taiwan prohibited all trade in raw and worked ivory on 29 August 1989, Hong Kong has continued to issue export permits for shipments destined for Taiwan, a country not party to CITES; at least two smuggling attempts into Japan over the last few months have involved Taiwan nationals, three of whom are facing prosecution (see page 55).

*Source: TRAFFIC Japan*

## Controversy over Asian Elephants

During 1989, the Netherlands granted import permits (under EEC legislation) for 17 Asian Elephants *Elephas maximus* from Myanmar, destined mainly for European zoos, accepting claims that the Elephants had been bred in captivity in timber camps; Asian Elephants were listed in CITES Appendix I in 1975 and Myanmar is not a CITES Party. The import caused protest from NGOs after it was revealed that one of the Elephants had died during transport and another died soon after arrival. A report on the matter which appeared in a UK newspaper,

*Sunday Times*, in June 1990, quoted the Director of London Zoo, which bought four of the Elephants from a Dutch importer, G. Van den Brink, for £23 000 (US\$41 400) each, as saying that both the conditions of transport and the proof of captive-breeding provided by the Myanmar authorities were unsatisfactory.

Recently, it has been revealed that two further import permits, each for seven Elephants from Myanmar, were issued by the Dutch authorities in April and June 1990. The first shipment of seven animals, also imported by Van den Brink, arrived in Rotterdam on 25 July 1990. It is believed that these animals will be re-exported to East Germany, France, Mexico and Yugoslavia; the latter two countries are not CITES Parties. The Dutch authorities' decision to allow these further imports has been widely criticised on legal grounds relating to the conditions which should be satisfied before trade in CITES Appendix I-listed species is allowed.

The first consideration is the fundamental principle in the text of CITES relating to trade in Appendix I species. This states that such trade, "must be subject to particularly strict regulation in order not to endanger further their [the species'] survival and must only be authorised in exceptional circumstances". Article III of CITES lays down conditions which must be met prior to the issuance of an Appendix I import permit. The strict controls of Article III do not apply, however, to Appendix I specimens bred in captivity. Article VII of the Convention states that such specimens can be treated as if included in CITES Appendix II if bred for commercial purposes, or otherwise traded under a CITES certificate; in either case no import permit is required.

To allow import of the "captive-bred" Elephants, the Dutch authorities should have been convinced that the terms of CITES Resolution Conf. 2.12 had been satisfied. This states that the captive parental breeding stock in a country of export must be, "maintained without augmentation from the wild" (with limited exception) and, "managed in a manner designed to maintain the breeding stock indefinitely". A recent WWF report indicates that the wild Elephant population in Myanmar is declining and expresses concerns about the deleterious effect of capture for breeding stock. It states that the management of captive Asian Elephants in Myanmar requires augmentation from the wild and mating of "captive" animals with wild animals.

This information on Elephant status in Myanmar is quite recent, but even before it became available, it is unclear how the Dutch Authorities were able to authenticate the captive breeding claims. They contacted the CITES Secretariat in 1987 when the first import applications were received for Elephants from Myanmar and were advised that limited imports may have been acceptable for recognised institutes, but that any future imports should be checked with the Secretariat. No such consultation is believed to have been carried out by the Dutch authorities since that time.

It is noteworthy that the Dutch authorities have stated that they were treating the animals as if included in CITES Appendix II, which implies that they accepted that the specimens had been bred in captivity for commercial purposes. If so, they had a further obligation to consult the Secretariat, as CITES Resolution Conf. 4.15 on the registration of captive breeding operations for CITES Appendix I species directs Parties not to accept documents based on commercial captive-breeding from non-Party states without consultation with the Secretariat.

After the most recent imports to the Netherlands, the CITES Secretariat has recommended to Parties that, unless new information becomes available on captive-breeding of Elephants in Myanmar, it is not advisable to accept imports from this source. The same direction has been given to EEC Member States by the Commission of the European Communities.

Steven Broad

## Recent Changes in World Ivory Trade

J.R. Caldwell & R.A. Luxmoore  
in collaboration with the TRAFFIC Network

The following report was prepared under contract to IUCN and presented at a ministerial level meeting of donor nations in Paris in April 1990. The report has been updated to incorporate changes that have taken place subsequent to that meeting.

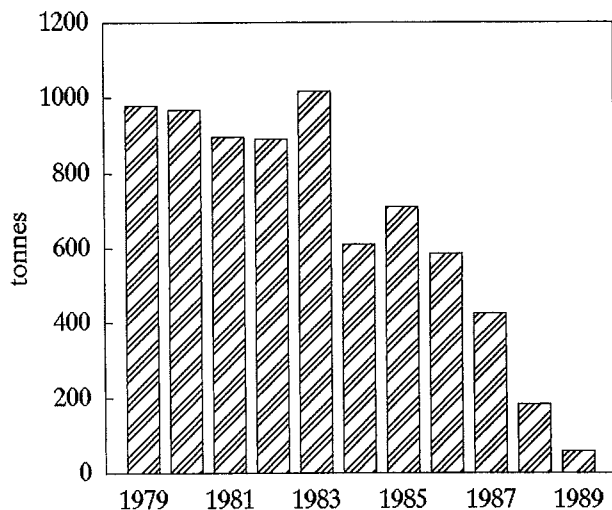
### Introduction

A major effort to review the world ivory trade culminated in mid-1989 with the production of the Ivory Trade Review Group (ITRG) report (Cobb, 1989) which was submitted to the seventh meeting of the Conference of the Parties to CITES, in October 1989. This report showed that ivory exports from Africa had been running at up to 1000 tonnes (t) a year in the mid-1980s, and it was instrumental in the decision to transfer the African Elephant *Loxodonta africana* from Appendix II to Appendix I. Data for the more recent years were less complete, but there were indications that the volume of ivory traded legally had fallen substantially in 1987 and 1988 as a result of the CITES ivory control system established in 1985 (see Fig. 1 and Tables 1a and 1b). The stricter controls imposed by the Appendix I listing would be expected to have an even greater effect on the volume and pattern of the international ivory trade.

The present report is an attempt to review the ivory trade in the run-up to the CITES meeting and following the Parties' decision to transfer the African Elephant to Appendix I. The transfer did not take effect until 18 January 1990, and so its full effects will not be apparent for some time. Nevertheless, it is important to formulate some preliminary impressions of the changes that have been forced on the trade, and to outline possible future developments. This may assist in deciding on the allocation of resources for the conservation of the African Elephant.

It should be appreciated that the extremely short time-scale for the preparation of this report and the very recent nature of the changes means that very few published or otherwise substantiated data are available. Much of the information used is necessarily anecdotal, and the conclusions should therefore be regarded as preliminary until further confirmation is received.

Fig. 1: Total ivory exports from Africa 1979-1989 derived from Luxmoore et al., (1989) and modified to include 1989 data from CITES export permits



### Legislative Controls

Throughout early 1989 there was a strong feeling that the African Elephant would be moved from Appendix II to Appendix I at the seventh meeting of the Conference of the Parties to CITES. In order that this measure to further protect the species did not lead to increased poaching and speculation within the trade, several countries introduced legislation to ban or severely restrict the trade in ivory. By Ivory Notification No. 44 of 24 January 1990, the CITES Secretariat requested all Parties to complete a questionnaire to help establish exactly what legislation is in force. The results of the questionnaire can be found on pages 59-62.

Prior to 18 January 1990, Botswana, China, Malawi, South Africa, UK, Zambia and Zimbabwe submitted reservations on the Appendix I listing to the Government of Switzerland (the Depository Government for CITES). In the case of the UK, it was clearly stated that their reservation was only for Hong Kong, was only applicable to re-exports and would only be in force for a six-month period. The reservation was withdrawn on 18 July 1990.

Although South Africa entered a reservation, it also informed traders and the CITES Secretariat that it intended to impose a moratorium from 18 January 1990 until 31 December 1990 on the trade, with the exception of hunting trophies and 'personal or household effects', and to follow the CITES procedures for downlisting its Elephant population to Appendix II.

### Changes in the Pattern and Volume of Trade

These legislative changes had a profound effect on both the volume of ivory entering trade and the traditional pattern of that trade. Table 1a shows the amount of raw ivory exported from Africa under the CITES quota system since its outset in 1986, in terms of weight of ivory (including cut pieces), number of tusks, and the estimated number of Elephants involved (assuming 1.88 tusks per Elephant - see Parker and Martin, 1982). The ivory quota system only records the ivory legally leaving Africa, and there is known to have been a substantially larger volume of illegal trade in 1986. The volume of illegal trade in 1987 and 1988 is thought to have been lower, but the data are less complete (Luxmoore et al., 1989).

Table 1a: African exports of raw ivory 1986-89, determined from CITES export permits

	1986	1987	1988	1989
Weight (kg)	188606	151938	117753	59300
No. of tusks	41344	31242	19973	7833
Est. no. Elephants	21991	16618	10634	4166

Tables 1a and 1b show that, from a level of almost 190 t in 1986, exports fell steadily to just under 60 t in 1989 and the number of Elephants thus killed to supply the legal trade fell from almost 22 000 to just over 4000. However, exports during 1989 were severely curtailed by the legislative changes, only 18 t being exported during the second half of the year, compared with almost 42 t in the first half. Although exports for the ivory trade collapsed, export of tusks obtained by sport-hunting continued at the normal rate. Between July and December 1989, Zimbabwe issued at least 130 permits for export of trophy tusks, amounting to some 4.5 t of ivory. Also during this period Ethiopia issued 25 permits for trophy exports, Mozambique 16 and South Africa issued three. Cameroon and Tanzania similarly issued export permits for trophies during the second half of 1989 but these had not been received by the CITES Secretariat in March 1990.

Table 1b: Weight of ivory (kg) exported from Africa under quota 1986-1989

	1986	1987	1988	1989
Angola	-	-	-	-
Benin	-	-	-	-
Botswana	70*	233	-	1110
Burkina Faso	-	-	-	-
Cameroon	500*	187	2538	1114
Central African Rep.	40*	171	260	176
Chad	-	1550	-	1039
Congo	8187	42539	18798	11383
Côte d'Ivoire	-	-	476	530
Equatorial Guinea	-	-	-	-
Ethiopia	4550	1621	2160	4514
Gabon	-	4205	13542	-
Ghana	-	-	-	-
Guinea	-	-	-	-
Kenya	-	-	-	-
Liberia	-	-	-	-
Malawi	100*	874	762	444
Mali	-	-	-	-
Mauritania	-	-	-	-
Mozambique	1549	8677	7302	5583
Niger	-	-	-	-
Nigeria	-	-	-	-
Rwanda	-	-	-	-
Senegal	-	-	-	-
Sierra Leone	-	-	-	-
Somalia	51184	-	22638	-
South Africa	30851	14452	7558	8982
Sudan	59526	63678	-	-
Tanzania	13173	2550	22581	799
Togo	-	-	-	-
Uganda	-	281	-	-
Zaire	5539	2544	11009	11777
Zambia	7739	2891	1622	2330
Zimbabwe	5598	5433	6983	9519
<b>Total</b>	<b>188606</b>	<b>151938</b>	<b>117753</b>	<b>59300</b>

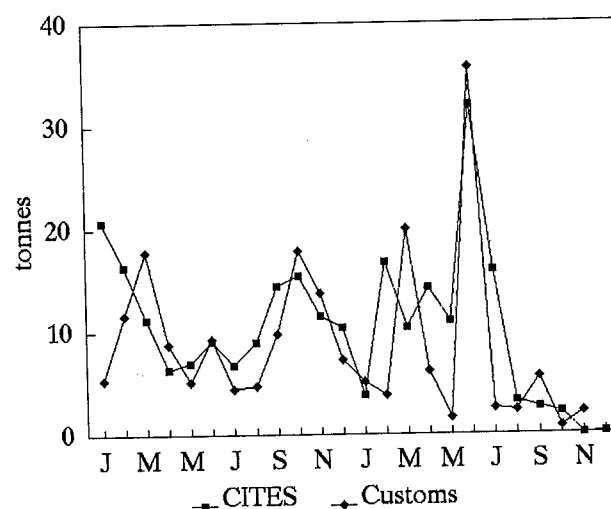
\* = estimated, assuming 5 kg a tusk.

Source: CITES Secretariat

The introduction, in 1989, of the new trade restrictions caused some unusual fluctuations in the pattern of the world ivory trade. The announcement in June 1989 that Japan would only import from "producer countries" effectively shut off the major market for Hong Kong's re-export trade. In the week before the Japanese announcement became effective, and as a direct result of that new legislation, export permits covering about 35 t of raw ivory were issued to Hong Kong traders. Fig. 2 clearly shows that exports reached a peak in June 1989. It shows data derived from both CITES permits and from published Customs statistics (to November 1989) and it is clear that normally the Customs statistics reflect the export permits issued during the preceding month. However in June 1989, both sets of data coincide indicating that very little time elapsed between the permits being issued and the exports taking place. Once the Japanese market was effectively closed to non-producer countries, the Hong Kong ivory traders began exporting to Singapore and more than 15 t was exported there in the second half of the year.

Zaire issued two export permits in June 1989 for a total of 7.2 t to Japan, for transactions already in progress when Zaire decided to suspend the issuance of export permits on 30 May. Another permit had been issued in May for 2.5 t destined for Japan via Belgium. However, none of these shipments was exported before both Belgium and Japan prohibited imports. The CITES

Fig. 2: Monthly exports of raw ivory from Hong Kong in 1988-89, indicated by CITES export permits and Customs export statistics



Secretariat was informed by the Zaire authorities that the expiry date of the permits had been extended to 30 October 1989 (and subsequently to 18 January 1990) and that the destination of the shipments had been changed to Taiwan. The Secretariat advised Zaire that the permits ceased to have validity in December 1989. With the introduction of a trade ban in Taiwan in August 1989, the ivory became effectively blocked in Zaire, and apparently is still there.

Congo also issued a permit to export ivory to Japan at the end of July but, as it would not arrive in Japan before the zero import quota became effective on 20 September, the purchaser cancelled the order. A new permit was subsequently issued for export of the ivory to Hong Kong, in order to fulfill a transaction apparently arranged over a year earlier, according to the Hong Kong CITES Management Authority.

Singapore and India both continued to allow raw ivory imports up to the 18 January 1990 deadline. Congo and Belgium exported 2.8 t and 2.2 t of ivory respectively to Singapore in January 1990.

Table 2 shows the gross and net ivory trade, as shown by export permits, of the major non-producer countries involved in the trade. Belgium is shown as a net exporter of ivory, due in part to shipments of ivory that had been imported in previous years, and partly to export of ivory (hunting trophies) purchased by Belgian traders from private individuals. Hong Kong is also shown as a net exporter, mainly to Japan, Taiwan and Singapore. It is significant that Singapore, which had been offloading its stockpile registered in 1986 to Japan and Hong Kong, was a net importer in 1989, reflecting the restrictions on imports into Japan.

Table 2: Major importers and re-exporters of raw ivory (kg) during 1989 indicated by CITES export permits

Country	Gross Import	Gross Export	Net Import	Net Export
Belgium	11889	45867	-	33978
China	28545	-	28545	-
Hong Kong	72829	113258	-	40429
India	4981	-	4981	-
Japan	95902	23020	72882	-
Macau	3933	186	3747	-
Singapore	40166	33031	7135	-
Taiwan	11442	-	11442	-

As a result of the long time delay before published Customs statistics become available, very little extra information can be added to that obtained from export permits; however the Customs statistics of Japan and Hong Kong are in close agreement with the data from CITES permits.

Table 3 shows import figures for raw and worked ivory derived from the Customs statistics from South Korea. Relatively minor amounts of raw ivory were imported between 1986 and 1989 (with a larger quantity imported in 1988, the year of the Seoul Olympic Games) but imports of worked ivory increased from an average of less than 300 kg a year between 1984 and 1988 to nearly 29 t in 1989. It is not known to what degree the ivory was worked and may represent substantially whole tusks. It seems quite likely that new businesses were being established in South Korea during 1989 as a safeguard against the collapse of the trade in the countries with traditional ivory industries.

**Table 3: South Korean imports of raw and worked ivory (kg) 1984-89, derived from Customs statistics**

Year	Raw	Worked
1984	0	49
1985	0	124
1986	555	560
1987	600	358
1988	2249	294
1989	800	28828

### Stockpiles

Considerable quantities of ivory are held throughout the world in both producer and consumer countries. It can be calculated that well in excess of 250 t of raw ivory is currently stockpiled in Africa and the real figure could be much greater. Large quantities are also held outside Africa. Estimates of current stocks held are shown in Table 4.

**Table 4: Estimated stockpiles of raw ivory (t)**

<u>African countries</u>			
Botswana	7	Namibia	20
Burundi	84	Somalia	11
Central African Rep.	4	South Africa	6
Côte d'Ivoire	10	Tanzania	30
Djibouti	2	Zaire	10
Gabon	1	Zimbabwe	10
Mozambique	80		
<u>Other Countries</u>			
Belgium	10	Singapore	60
Hong Kong	324	United Kingdom	5
Portugal	5	USA	80

### African countries:

#### Botswana

It is believed that stocks of around 5-7 t are currently held but there are plans to cull 2000 Elephants in 1990; if this goes ahead the amount of ivory available would increase significantly during the year.

### Burundi

The largest official stock of ivory is in the possession of the Burundi Government in Bujumbura and, at the 18th meeting of the CITES Standing Committee, was reported to be 84 t, some of which is scrap. A move to sell 27 t of this stock to India before the deadline of 18 January 1990 failed.

### Mozambique

The export quota that Mozambique submitted to the CITES Secretariat for 1987 was to cover 19 700 tusks said to have been confiscated from poachers; since that time, only 4063 tusks (21 t) have been legally exported. The weight of the remaining tusks, assuming an average tusk size of 5 kg, would be in the region of 80 t. It seems likely that further seizures of ivory have been made since 1987, as the quota submitted for 1989 was for 17 961 tusks. The CITES Secretariat was informed by Mozambique that it would not be entering a reservation on the Appendix I listing but requested assistance to trade confiscated ivory.

### Namibia

At least 8 t were offered for sale in 1989 but later withdrawn from tender. With recent confiscations there could now be at least 20 t in stock.

### Somalia

Five permits were issued in October 1989 to export some 1650 tusks weighing 11.3 t to Japan. However this was after the Japanese import ban came into effect and the permits were rejected by Japan. The CITES Secretariat has had no information to suggest that the ivory has been legally exported elsewhere but it is rumoured that a large shipment moved illegally into the United Arab Emirates and then back again when no buyer could be found.

### South Africa

Estimates from ivory traders in South Africa are that current stocks, including those held by the Kruger National Park, amount to no more than 6 t. However it is not clear whether recent seizures by the police are included in that sum.

### Tanzania

Information from several sources reveals that attempts were made in late 1989 to sell stocks of up to 30 t. Recent seizures amounting to over 10 t, a quantity of confiscated tusks weighing 4 t held in Arusha, and considerably more held in the Government ivory store in Dar es Salaam, would suggest that the total stocks held in the country could be well in excess of that figure.

### Zaire

Three permits, issued in 1989 and covering 9.6 t of raw ivory, were not used and it is believed that the tusks are still in Zaire. Huge stocks of both raw and worked ivory, well in excess of 100 t, are believed to be held in the interior of the country.

### Zimbabwe

Estimates of stocks of raw ivory vary from 8-12 t but there could be as much as 20 t available and a considerable quantity of worked ivory. Zimbabwe also plans to cull Elephants during 1990.

### Other African Countries:

Several other countries in Africa hold stocks. It is believed that at least 10 t may be held in Côte d'Ivoire, 3.8 t in Central African Republic, 1.3 t in Gabon and 2 t in Djibouti but the total held in these countries may be considerably higher. Ivory has been offered for sale to Japanese and European companies by sources in Central African Republic (26 t) and North Yemen (10 t) but neither of these offers has been substantiated. It is possible that these offers include ivory from one of the stockpiles mentioned earlier. There are also rumours of important stocks in Congo, perhaps as much as 12 t, but these are as yet unsubstantiated.

### Other countries:

#### Belgium

One shipment of 2.5 t (416 tusks), originally destined for Japan, is currently held in Antwerp and up to 10 t may be elsewhere throughout Belgium and held in private hands. Analysis of CITES export permits shows that virtually none of the ivory imported since 1986 now remains in the country.

#### China

The inventory of stocks shows that over 200 t are currently held, most of which is worked. This does not include stock in shops and in private ownership (E. Martin, pers. comm. to D. Melville, 5 May 1990).

#### Hong Kong

The stocks of ivory held in Hong Kong are unquestionably large but their exact size is the subject of some dispute. In December 1986, the Management Authority registered a total of 179 t of tusks and 42 t of cut pieces, but no attempt was made to mark this ivory unless it was to be re-exported. Between January 1986 and December 1989, CITES permits show the net import of 351 t of raw ivory, giving a potential legal stock of 572 t at the end of 1989, assuming none had been carved during the three years. A more detailed inventory in July 1989 found 119 t of raw tusks, 378 t of cut pieces, and 168 t of worked ivory (Milliken and Melville, 1989). This was the size of the stockpile officially reported at the seventh meeting of the Conference of the Parties. The Management Authority confirmed (*in litt.* to WWF-Hong Kong, 19 January 1990) that since then they had issued permits for the export of 37 t of raw ivory and 10 t of worked ivory, leaving an apparent balance of 460 t and 158 t of raw and worked ivory, respectively. A subsequent letter (27 February 1990) confirmed that current stocks amounted to 107 t of tusks, 217 t of scraps and cut pieces and 150 t of worked ivory, a total of 474 t. The letter indicated that the July 1989 inventory had been incorrect and had included an inflated quantity of cut pieces and scraps. This may have been an attempt by the traders to bolster their claim to continue trading in ivory.

Between 18 January and 7 July 1990, a total of 591.9 kg of worked ivory and 8490.7 kg of raw ivory have been exported from Hong Kong (see Table 5). The total of commercial ivory stocks known to be in Hong Kong on 7 July 1990 was 468 tonnes (Hansard, 9 July 1990). 352 tonnes had CITES documentation and could be exported commercially until the reservation period expired on 18 July 1990 (see page 49).

#### Portugal

Portugal registered 1089 tusks weighing 14.4 t in 1986. Of this, 334 tusks weighing 4.7 t apparently remain.

**Table 5: Ivory exports from Hong Kong (18 January to 7 July 1990)**

	Destination
China	8490.7 kg (raw)
South Korea	214.6 kg (worked)
Mexico	195.2 kg "
Andorra	121.7 kg "
Taiwan	38.2 kg "
Saudi Arabia	8.8 kg "
Australia (pre-CITES)	8 kg "
UK (personal effects)	5.4 kg "

Source: Dept. of Agriculture and Fisheries, Hong Kong

#### Singapore

Analysis of export permits shows just over 40 t of ivory imported by Singapore since 1987, most of it (almost 30 t) in 1989. Less than 1 t has been re-exported. About 20 t remain of the ivory registered in 1986 so current stocks could well be in excess of 60 t.

#### United Kingdom

UK Customs have made several seizures since 1988 and currently hold about 4.5 t. It is estimated that commercial concerns are now only holding about 0.5 t.

#### USA

In 1989, sources in the ivory industry estimated that about 80 t of ivory was held in the USA (Thomsen, 1989). This figure is a combination of stocks held by ivory dealers and private investors, scraps, and large trophy collections currently for sale. In addition, very large amounts of worked ivory are held on the east and west coasts and in Hawaii. Finally, since the USA instituted an import ban in June 1989, the Fish & Wildlife Service has seized significant quantities of both raw and worked ivory.

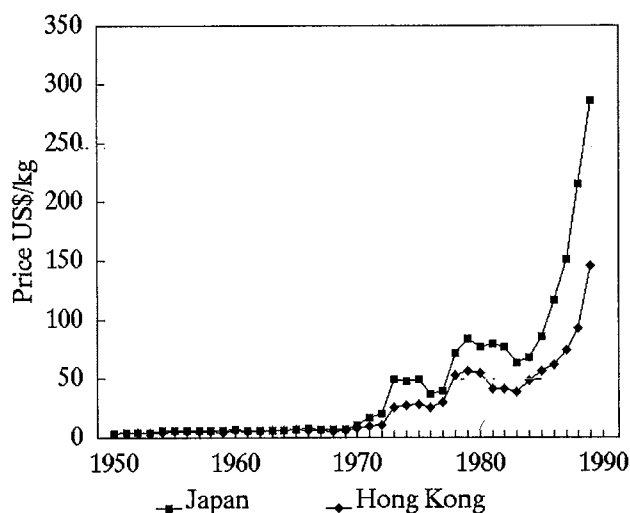
Other countries which have stocks of ivory, both worked and raw, are: China, France, F.R. Germany, India, Japan, Macau, Taiwan and the United Arab Emirates. It is very likely that further countries, not listed here, hold important stocks of ivory. India wanted to take out a reservation but failed to submit it before the 18 January 1990 deadline. The reservation was to have been for one year only, to allow re-exports of stocks of worked ivory held by craftsmen and traders; it is possibly an indication that there is a considerable stockpile there.

#### Ivory Prices

The longest record of ivory prices comes from Japanese and Hong Kong Customs import statistics (Fig. 3). The value rose rapidly in the 1970s and 1980s to reach a peak of nearly US\$300 a kg in 1989. The higher value of imports to Japan is due largely to the greater average size of the tusks imported. A closer inspection of the value of ivory imported in each month of 1988 and 1989 (Fig. 4) shows that, after the peak of trading activity in June 1989, the price of ivory imported to Hong Kong appears to have fallen substantially. Japan appears to have imported no ivory since September 1989, so there is no price available for the remainder of the year.

Prices tendered for ivory offered for sale by the Kruger National Park in South Africa are thought to be a very good indicator of overall world prices (J. Ilesley, *in litt.*). Recent figures for Kruger National Park sales are shown in Table 6. This indicates that there was a steady increase in the price of raw ivory on the world market between 1987 and the beginning of 1989. The ITRG report (Cobb, 1989), shows the price of ivory from Zaire

Fig. 3: Price of raw ivory imported to Japan and Hong Kong from 1950-1989, determined from Customs statistics



increasing from US\$60-65 a kg in 1988 to US\$85-95 a kg in June 1989. It then fell to US\$40-45 a kg in August 1989. More recent information from Zaire (T. De Meulenaer, pers. comm.) suggests that, although several tonnes are being offered for sale at US\$30 a kg, there are no buyers. This state of affairs appears to be confirmed by the Kruger National Park information. On 6 November 1989, 241 tusks weighing 1.3 t were offered for tender by the Kruger National Park authorities; however, sources within the ivory trade report that apparently no bids were received and the tender was withdrawn. Local traders were apparently unwilling to purchase stocks in view of the import restrictions in Japan and Hong Kong.

It is reported that most ivory retail shops in Hong Kong have had 'sale' notices in the windows for the past few months, but it is unclear by how much prices have dropped in real terms (D. Melville, *in litt.*). However, sources within the ivory trade suggest that the wholesale price of ivory products fell by 15-20% in the second half of 1989 owing mainly to uncertainty over the future of the industry and to some of the small traders liquidating their stock very cheaply. In February 1990, prices were reported to have returned to the level they were at in mid-1989 (T. De Meulenaer, *in litt.*).

Similarly, in Belgium the price of raw ivory has decreased marginally but some traders are optimistic that it will improve during 1990, especially if a local carving industry can be established. The price of worked ivory has remained stable or increased slightly and there is apparently still a strong market for high quality carvings amongst collectors.

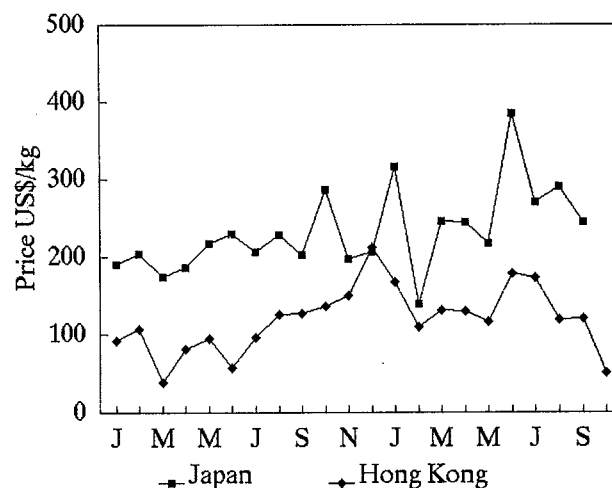
Recent information from the USA (J. Thomsen, *in litt.*) suggests that the current price there of raw ivory tusks is US\$130 a kg and of raw ivory slabs and chunks (cut pieces) is US\$38-70 a kg. Many US dealers in jewellery and trinkets report that the worked ivory market virtually collapsed during the second half of 1989, apparently as a result of customer resistance. In an unprecedented move to liquidate stocks of worked ivory, many east-coast dealers had reduced prices by as much as

40-60% prior to Christmas 1989. In early February 1990, prices in Hawaii (traditionally one of the most important US markets for worked ivory) were reduced by as much as 70% but traders reported very little being sold (J. Thomsen, *in litt.*).

In late 1989 there was some indication that the price of worked ivory in Singapore was falling as items were being offered at a 30% discount (R. Luxmoore, unpubl.).

According to further information from within the ivory trade, the price of ivory is currently very high on the Japanese internal market and it appears that retailers and companies whose interests include import, manufacture and retail are benefiting from this development. Retail prices for manufactured products have risen steadily, with small name seals now costing 12% more than they did in early 1989 and speciality items, such as plectra for classical Japanese musical instruments having doubled in price (T. Milliken, *in litt.*). However, there is apparently widespread anxiety about the future of the industry; manufacturers and carvers are having to pay higher prices for the raw materials but are unable to wholesale their products at proportionately more. It is the traders who managed to import and stockpile ivory before the zero import quota became effective who are making large profits.

Fig. 4: Price of raw ivory imported to Japan and Hong Kong from January 1988 to October 1989, determined from Customs statistics



#### Illegal Trade

There is currently little evidence of continuing illegal trade; however poaching still continues and, as outlined above, there are major stockpiles of ivory in Africa that now cannot be traded legally on the international market. Most of the information on this subject is unsubstantiated and anecdotal; the Malawi Wildlife Department reported the poaching of 14 or 15 Elephants in Kasungu National Park in January 1990 and there have been reports of recent poaching in Mt. Elgon and Tsavo National Parks, Kenya. The Tanzanian National Parks Authority also report that poaching levels are still high. It was reported in the Tanzanian Press in January that police had seized 836 tusks, weighing about 3 t, that had been buried on an offshore island. The Tanzanian National Parks Authority also reported that 1909 tusks (8 t) had been seized in late January, also on an offshore island, and 600 tusks were confiscated near Dar es Salaam in February. If former practice had been followed, these stocks would have been smuggled to India and the Middle East in dhows.

As mentioned above (Table 3), Customs statistics from South Korea show a total of 800 kg of raw ivory as having been imported between January to October 1989. Only 460 kg of this was covered by permits received by the CITES Secretariat, so it is possible that the remainder is an indication of illegal trade. The statistics do not

Table 6: Price in US\$ per kg of ivory sold by Kruger National Park, 1987-89

Tusk size	Jul'87	Jan'88	May'88	Jan'89
3 kg	105	135	150	161
5 kg	120	165	168	188
20+ kg	170	250	280	318

Source: J. Iisley *in litt.*



necessarily list country of last consignment and so, although Saudi Arabia, Gabon and Zaire are given as the sources of the remaining 340 kg, it is impossible to determine from which countries it was actually imported. There are very strong rumours that a large quantity of the Hong Kong stockpile has been moved to South Korea (T. De Meulenaer, *in litt.*), and there have been a number of seizures in Belgium and Hong Kong involving Koreans returning to Seoul from Gabon with raw ivory in their luggage (D. Hykle *in litt.*). A total of 111.7 kg of worked ivory has been seized in Hong Kong between January and May 1990 (see Table 7). The Department of Agriculture and Fisheries is compiling information on the country of origin of current stocks.

Japan would appear to be a target destination for the sale of name seals and possibly other ivory products that can be easily carried in hand baggage. Several seizures have been made by Customs officials at Narita and Kobe airports since November 1989, particularly involving travellers from Taiwan. In February 1990, 12 000 unfinished seals were seized and six people were arrested in connection with the offence; in April, a further 1250 seals were seized from a Taiwanese Customs official arriving from Hong Kong. In the most recent seizure, in June, some 30 000 unfinished seals, weighing approximately 1 t, and with an estimated value of US\$2 million, were confiscated from a ship in Naha, Okinawa. The shipment is believed to have been loaded in Hong Kong. It is the largest ivory confiscation in Japan to date (T. Milliken, *in litt.*).

**Table 7: Seizures of worked ivory in Hong Kong (1 January - 20 May 1990)**

Country of Export	kg
Taiwan	54.8
Thailand	22.5
China	18.1
Japan	8.7
USA	5.7
UK	1.9

Source: Dept. of Agriculture and Fisheries, Hong Kong

#### Changes in Tusk Size

Table 8 shows the average weight of tusks exported from Africa between 1986 and 1989, derived from information from CITES ivory export permits; it indicates an increase from 4.6 kg in 1986 to 7.0 kg in 1989. The lower average tusk weights in 1986 and 1987 were due to exports of large numbers of very small tusks from Somalia and Sudan. Somalia exported nearly 17 000 tusks with an average weight of 3.0 kg in 1986 and Sudan exported 20 614 tusks in 1987 with an average weight of only 3.1 kg. In 1988, exports from Somalia and Tanzania amounted to 11 764 tusks averaging 3.6 kg. However, in 1989 the only large shipment of small tusks was 839 from Zambia, with an average weight of 2.8 kg. The commercial shipments from Congo, Ethiopia and South Africa had very high average tusk weights, being 18.3, 9.0 and 10.3 kg respectively. The higher relative proportion of hunting trophies exported in 1989 would also have caused an increase in the average tusk weight.

#### Assessment of legal channels for trade

##### 1) Commercial trade

The listing of the African Elephant in Appendix I has effectively prohibited most international trade "for primarily commercial purposes". It should be noted that the Appendix I listing also applies to live African

**Table 8: Average weight of tusks exported from Africa 1986-89, derived from CITES export permits**

1986	4.6 kg
1987	4.9 kg
1988	5.9 kg
1989	7.0 kg

Elephants, as well as to skin, leather and goods made of those substances. There are relatively few exceptions:

##### a) Trade between non-Parties and Parties holding reservations.

Trade between non-Parties is not covered by CITES, but Parties must abide by the normal controls for Appendix I products when trading with non-Parties. Under the terms of the Convention, Parties holding reservations are to be treated as non-Parties, but CITES Resolution Conf. 4.25 recommends that they continue to treat the African Elephant as if it were in Appendix II. This means that they should issue export permits when exporting to non-Parties, and demand to see export documentation when importing Elephant products. It should be noted that further reservations may only be taken when countries join CITES, as the deadline for Parties has already passed.

Of the five African countries that have entered reservations, four, Botswana, Malawi, Zambia and Zimbabwe, are members of the Southern African Development Co-ordination Conference (SADCC). At a special meeting of SADCC Ministers of Agriculture and Natural Resources, held in Lesotho in November 1989, these four countries, and Mozambique, agreed on a system for ivory marketing and control. The main objective of this was to establish a single system for marketing ivory from Southern Africa which:

- meets the requirements of CITES;
- controls and limits legal trade as strictly and simply as possible;
- reduces illegal trade to the lowest possible level;
- complements efforts to conserve Elephants in other countries and regions of Africa;
- ensures that the greatest possible revenue is obtained from sustainable utilisation of the resource;
- encourages participating countries to increase investment in the resource; and
- ensures that control of the resource and its revenues is held locally within each country.

Its long-term objective is to strengthen local manufacturing industries and increase value-added production and export. It is envisaged that a regional centre, to be known as the Southern African Centre for Ivory Marketing (SACIM), will be set up in Gaborone, Botswana. Its function will be to store and auction all raw ivory produced in each of the participating countries, apart from hunting trophies and a small quantity reserved for national carving industries. It should be noted, however, that Mozambique, which possibly has the largest available stock of ivory among the SADCC countries, did not enter a reservation and thus cannot legally move ivory to Botswana. Furthermore South Africa, which has also entered a reservation, is not a member of SADCC and cannot, therefore, participate in the system.

##### b) Pre-Convention specimens.

Article VII of CITES stipulates that commercial trade in products of species listed in Appendix I may take place where the Management Authority issues a certificate stating that they were "acquired before the provisions of the present Convention applied to that specimen". This



phrase was interpreted by CITES Resolution Conf. 5.11 to mean either before the species was listed in any of the CITES Appendices (i.e. 1976, when *L. africana* was included in Appendix III) or before both the importing and exporting country became a Party to CITES. Some Parties have argued that they should be allowed to re-export ivory which was legally imported before 18 January 1990, but to do so they would need to ignore CITES Resolution Conf. 5.11.

This has implications for the 27 t of ivory held in Burundi before that country became party to the Convention in November 1988, and to stocks in Namibia, which is thought likely to join both SADCC and CITES following its independence.

c) Captive-bred specimens.

Specimens of species listed in Appendix I which were bred in captivity for commercial purposes may be traded as if they were in Appendix II. CITES Resolution Conf. 2.12 recommends that this should only apply to the products of animals conceived and born in a "controlled environment". CITES Resolution Conf. 6.21 recommends that approval for the first commercial captive-breeding operation for any species should be approved by two-thirds majority at a meeting of a Conference of the Parties or by postal vote procedures. The only African Elephant population that might currently meet the conditions necessary to be considered as a possible captive-breeding operation is that of the Kruger National Park in South Africa.

2) Non-commercial import

a) Hunting trophies.

Import permits may be granted for Appendix I specimens when they are not to be used for primarily commercial purposes and where the Scientific Authority in the importing country is satisfied that the purposes for the import are not detrimental to the survival of the species. Import permits can, therefore, legitimately be granted for trophy specimens, although some countries have domestic legislation which forbids the import of trophies of certain Appendix I species from certain countries.

b) Personal possessions.

Personal possessions of Appendix I specimens may be moved internationally without permits if they are being imported to some country other than the owner's state of usual residence. If the owner is returning them from a primary exporting country to his state of usual residence, then he must obtain first an import, then an export permit. If the ivory products are being re-exported, then the import permit may be obtained after the re-export certificate has been issued.

c) Scientific or educational purposes.

Import permits may be granted for scientific or educational purposes and, in some cases, defined in Article VII, the need for permits is waived.

Assessment of potential for ivory trade in future

A number of African Elephant range states, which are neither party to CITES nor hold reservations against the Appendix I listing, are potential future legal sources of ivory. These are: Angola, Côte d'Ivoire, Djibouti, Equatorial Guinea, Guinea Bissau, Lesotho, Mali, Sierra Leone, Swaziland and Uganda. It should be noted that, as border controls within Africa are notoriously difficult to police, it is quite likely that ivory acquired in other countries which are party to CITES will be re-exported through some of the above countries.

Potential importers of ivory are shown in Table 9. In addition to ensuring that there is a demand for ivory, the importing country must also have the foreign exchange available to pay for such a luxury commodity. As an indication of this, the Gross National Product per capita is also given in the Table. In many of the richer countries there is no traditional demand for ivory. Conversely, although China has an ivory industry of great antiquity, it has insufficient purchasing power to obtain significant quantities of the raw material. The greatest current potential for importing raw ivory probably lies in the Far East, notably the Republic of Korea which has also recently imported large quantities of worked ivory, and there has been a suggestion that a market may be developed in Laos. The Arab countries might also buy ivory if a market were to be developed there and certainly have the resources to afford such a commodity. Several of the Caribbean countries might become a greater outlet for worked ivory via the tourist trade than they currently are. South America has also been suggested as a market for considerable quantities of worked ivory and it has been rumoured that one Hong Kong trader has already moved his entire stock of worked ivory to Argentina.

Although it has banned the import of ivory, Taiwan is potentially an important market on account of its wealth. The involvement of Taiwanese in recent attempts to smuggle ivory to Japan is an indication of continuing interest. Inefficient import controls may encourage the sale of ivory to other countries which are party to CITES; the import legislation is notably deficient in this respect.

It has been suggested that much of Hong Kong's stockpile would be moved to China, but this appeared not to happen in the six-month period for which a reservation was in force, and is unlikely in future owing to China's lack of foreign exchange. Hong Kong has exported considerable quantities of ivory to China previously but only to have it carved and then returned to Hong Kong. It would appear that the only reason for Hong Kong traders to move ivory to China now would be if they were able to retain ownership, which would allow them to seek new markets.

As with the exports, it is also possible that ivory might be imported to one of the non-Parties and then re-exported illegally, aided by inefficient border controls, to a Party where a market for ivory already exists. In this respect Mexico could well provide an entry point for ivory, particularly in worked form, to the USA. It would theoretically be possible to set up a small carving industry close to the US border in Mexico to exploit this situation. Some of the Eastern European countries could possibly perform a similar role for movement of ivory into the rest of Europe.

It is apparent that the principal problem for ivory trade in the future lies not in securing a supply but in finding a market.

The so-called Somali amendment, adopted at the seventh meeting of the Conference of the Parties, forsee the transfer of certain populations of Elephants back to Appendix II if certain criteria can be met. If this occurs, then those countries will potentially be able to export their ivory to any CITES Party which will accept it. The most obvious candidate is Japan, which clearly wants to continue its ivory industry provided that legal supplies of ivory can be found. In Europe and North America, it is quite likely that public opinion will force the retention of stricter domestic measures to continue the ivory trade ban.

To date, only South Africa has announced its intention to submit a proposal to transfer its Elephant population back to Appendix II. Assuming that such a proposal is prepared, and that it is given a favourable response by the Panel of Experts that is convened to evaluate it, there remains the problem of having it accepted by the Parties. This would require a two-thirds majority if it was submitted to the Conference of the Parties or to a postal vote. Unless there is a radical

Table 9: Countries not party to CITES (or territories not covered by CITES) outside Sub-Saharan Africa, showing the Gross National Product (GNP) per capita (US\$) (excepting China, a CITES Party which holds a reservation (\*) against the Appendix I listing).

	GNP		GNP
Qatar	22940	Albania	930
Brunei Darussalam	15400	Western Samoa	770
Iceland	15252	Tonga	580
Kuwait	13890	Yemen, A.R.	550
Nauru	9091	Solomon Islands	530
Czechoslovakia	8700	Tuvalu	500
Bahrain	8530	Cape Verde	460
Libya	7180	Mauritania	440
Saudi Arabia	6930	Sao Tome & Principe	340
Bulgaria	6460	Haiti	330
Oman	4990	Maldives	310
Barbados	4668	Comoros	280
Korea, Republic of	3450	Yemen, P.D.R.	270
Cuba	2696	China*	250
Romania	2540	Laos	220
Antigua & Barbuda	2380	Viet Nam	200
Yugoslavia	2300	Myanmar	200
Iraq	2140	Bhutan	160
Syria	2000	Andorra	?
Mexico	1850	Anguilla	?
Fiji	1810	Aruba	?
Grenada	1240	Cambodia	?
Dominica	1210	Kiribati	?
Korea, North	1180	Lebanon	?
Jamaica	1068	Netherlands Antilles	?
Turkey	1020	Turks & Caicos	?
Mongolia	940	Western Sahara	?

▷ change of international opinion from that exhibited at the seventh meeting of the Conference of the Parties, it is unlikely that either route would be successful.

### Substitutes for Ivory

There has been considerable interest among conservation NGOs in developing substitutes for Elephant ivory that would find favour in the carving industry. However, Elephant ivory has particular qualities of colour, "feel" and grain, in addition to the mystique of coming from an exotic animal, which make most obvious substitutes unsatisfactory.

Ivory traders believe that there is no real commercial value to plastics; and vegetable ivory, in its basic form, is too small to produce anything but small carvings. Research has been carried out on developing methods to increase the size available by binding pulverised vegetable ivory with resin, but this is still at an early stage.

Teeth of animals such as the Hippopotamus *Hippopotamus amphibius*, and the tusks of Walrus *Odobenus rosmarus*, and Narwhal *Monodon monoceros*, are carved to a small extent and may become more important in future. Although hippo teeth tend to be too small to produce large high-quality carvings, and their quality tends to be poor, they are reported to be very suitable for traditional scrimshaw in the USA (J. Thomsen, pers. comm.). In 1989, Japanese traders imported 1235 kg of hippo teeth from Malawi, South Africa and Tanzania and, from January to March 1990, a further 3705 kg from Malawi, Tanzania, Uganda and Zaire. Hippo teeth have regularly been carved in the past in Hong Kong, and recent evidence suggests that this practice may be increasing. The import of non-elephant ivory from Africa recorded in Customs statistics rose in 1989.

The Hong Kong Government is considering a request by ivory workers to establish training courses for carving

cow bone; this would include a subsistence allowance to each student of HK\$2500 (US\$315) a month (D. Melville, *in litt.*, 2 May 1990). Some bone is already used for carving trinkets, and a technique has recently been developed to treat bone to give it the qualities required for the production of piano keys. It is reported that Steinways are now using around 40 keyboards a month utilizing bone rather than ivory. The Sakai Scientific Institute in Japan has apparently developed an ivory substitute based on egg shells which, like elephant ivory, has the capacity to absorb moisture, and for which the production costs can be kept very low. Yamaha are now using a plastic for piano keys that is reputed to have most of the qualities of ivory.

The substitute for elephant ivory receiving the most attention is ivory from extinct mammoths *Mammuthus*. Large numbers of tusks are potentially available, but obtaining them in any quantity may be problematic because they are preserved in the Arctic permafrost in the USSR and Alaska. Technically, mammoth ivory has similar qualities to elephant ivory but there are severe problems with it cracking. Ivory that is cracked will continue to crack; ivory that is not, will not crack subsequently. According to sources in the ivory trade, roughly 70-80% of mammoth ivory is of poor quality and so the wastage is very high. Nevertheless, TRAFFIC Japan estimates that Japan imported nearly 2 t of mammoth ivory from USSR, Canada and the USA in 1989 and 412 kg in 1990; a further 7876 kg of unidentified ivory was imported from Iceland in 1990. West German carvers have reportedly ordered 1.3 t of mammoth ivory from the USSR, and Hong Kong traders have also apparently been showing an interest, with the price there reported to have risen from US\$300 to US\$800 a kg (South China Morning Post, 29 December 1989). It has been suggested (D. Melville, *in litt.*) that Hong Kong traders may attempt to treat elephant ivory to make it appear like mammoth ivory. This could possibly lead to problems with enforcement unless controls on mammoth ivory are introduced.

### Discussion

The legislative controls on international trade in ivory introduced progressively over the past years have been accompanied by some profound changes in the trade. The total volume of legal trade has declined until, now, it is virtually confined to the export of a small number of hunting trophies. Before 1988 there were a variety of channels by which illegally acquired ivory could be laundered into legal trade, but new controls introduced since then have curtailed this. There is little direct evidence that the illegal trade has declined further as a result of Appendix I listing, but the uncertainty surrounding the future of the trade appears to have had an impact on the price of raw ivory.

With the exception of Japan, most of the countries which have a tradition of ivory carving already have sufficient stockpiles to fulfil their needs in the immediate future. There has thus been little incentive for them to seek new supplies of ivory either legally or illegally. Most of the interest in trading ivory has come from the exporters who have been keen to offload their stocks whilst they were still able. The traders in Hong Kong successfully lobbied the UK Government to take a reservation on their behalf to allow re-exports, and a similar reservation was not taken by India only owing to a bureaucratic error. The large shipment of ivory which was reported to have left Somalia in late 1989 is said to have been returned, apparently having found no buyers in the Middle East; and traders in Tanzania have been trying, unsuccessfully, to sell stockpiles of ivory. As ivory is a luxury product, the consumers can in no way be considered to be dependent upon it in the same way that the carvers are. Countries which have substantial carving industries therefore stand to lose most from a ban

on trade and would be expected to raise the strongest objections to it. Hong Kong has already taken a strong stand on this issue and Japan might be expected to if no legal supplies are found at the eighth meeting of the Conference of the Parties to CITES.

The ivory trade, whether legitimate or otherwise, needs a consumer to purchase the end product. The countries which formerly provided the bulk of the market, Japan, Europe and the USA, are now effectively closed, and attention is likely to turn to the richer countries of the Middle East and Asia. As the economies of other consumer countries improve, it is likely that some of their newly acquired wealth will be used to purchase ivory and other luxury products, particularly if the price has fallen in the interim. It is therefore only a matter of time before the trade finds another outlet.

In the short-term, outside the relatively closed market of Japan, the supply of ivory seems to exceed the demand, and this has been accompanied by a drop in price within Africa. Whether this persists depends on whether new markets, either for legal exports by the countries holding reservations or the illegal trade, can be found. It seems likely that there will always be a small collectors' market for high quality, and therefore high value, carvings in Japan, Europe and the USA; indeed it has been suggested (T. De Meulenaer, *in litt.*) that the carving industry in Belgium is considering employing artisans from Hong Kong to prepare high quality goods for the European market.

A continuing slump in the ivory price may encourage some speculative buying and it is reported that Belgian traders have already taken advantage of the low price of ivory; they are apparently in no hurry to unload current stocks. Similarly, it is reported that in Hong Kong the major traders are each retaining about 10 t of raw ivory, composed of very big tusks, as a long-term investment. This may be because of the slight possibility that legal trade may resume after the eighth meeting of the Conference of the Parties to CITES. The financial viability of such a course of action depends on the interval over which ivory trade remains banned. If the trade is halted for several years the ivory price would have to be substantially discounted. As the stocks in the consumer countries become gradually depleted it seems likely that the price of their remaining stocks will increase. While the price within Africa remains at the current low level, the price differential will stimulate the illegal trade and, although the amount of ivory involved should be relatively small, it would eventually cause the price to rise in Africa.

The use of substitutes such as bone and mammoth ivory may reduce the demand for elephant ivory even further, as will changes in the way ivory is used. In Japan, for example, name seals use over 50% of the ivory imported. It has been suggested that if the manufacture of seals is modified, so that the handles are composed of a substance other than ivory, then much less ivory will be required.

It is valid to ask whether the ban on legal commerce in ivory imposed by the Appendix I listing is likely to effect any reduction in poaching, in view of the fact that similar measures have patently failed to protect the rhinoceroses. The two trades, although superficially similar, do have significant differences, principally in the location and type of market. Ivory is mainly bought in affluent countries as a high-status, fashion object. If public opinion is effectively turned against this, then its display will become unfashionable, in the same way that it is no longer acceptable, throughout most of Europe and North America, to wear fur coats made from cat skins. The difficulty in selling ivory in the USA is an indication that this is happening. Rhino horn, on the other hand, is bought as a fashion object only in Yemen, but as a widely used medicinal product throughout the Orient. The ability of public awareness campaigns to affect the people of Yemen is severely limited, and the medicinal trade is also insensitive to campaigning as it can be carried on

covertly. As Swanson (1989) concluded, Appendix I listing, may therefore be effective in the short term, but only until new markets for ivory are found. Unfortunately, the current control measures encourage those countries with the largest supply of ivory to seek new markets amongst those countries which are not party to CITES - precisely those which are likely to be least sensitive to media campaigns orchestrated by Western NGOs. This will tend to shorten the effective life of the ban.

In the long-term, a major problem with control of the ivory trade may be the large stockpiles of ivory which already exist and which will gradually accumulate within Africa. Even in the unlikely event that the combination of a drop in ivory price with increased local protection can slow the rate of poaching, tusks will still accumulate from natural mortality and as previously concealed hoards are unearthed. It may not be widely appreciated amongst African governments that such stocks can no longer be legally traded under the current terms of CITES, and the dawning realisation of this may bring an irresistible demand for change. Kenya has set a precedent by destroying 12 t of ivory stocks, and Taiwan has recently followed suit (see page 49), but it is unrealistic to expect the same treatment for the remaining 300-odd t held in the continent. A reduction in the price of ivory and the banning of the trade will also make it impossible for African governments to profit from their Elephants except by tourism. This will both decrease the incentives for them to introduce protection measures and increase the potential profits to be made by those traders who evade the trade controls.

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## Survey of Ivory Trade Regulations

compiled by Douglas J. Hykle, CITES Secretariat

The decision taken at the seventh meeting of the Conference of the Parties to CITES to transfer the African Elephant *Loxodonta africana* from Appendix II to Appendix I, formally entered into force on 18 January 1990. This effectively prohibits all international commercial trade in ivory and other Elephant products, as well as live animals, among CITES Parties. Under the terms of the Convention, hunting trophies and tourist souvenirs may still be imported for non-commercial purposes, provided an export permit and an import permit have been granted in accordance with Article III, paragraphs 2 and 3 respectively. In addition, Article VII provides for certain exemptions to the usual permit requirements, for specimens that are personal or household effects, and 'pre-Convention' specimens.

Many Parties have exercised their privilege under the Convention to adopt stricter domestic measures with respect to trade in ivory, and others have informed the CITES Secretariat of their decision to ban the import of ivory entirely. The Secretariat sent a questionnaire (Ivory Notification No. 44, 24 January 1990) to all Parties, dependent territories and non-Parties to seek details of their country's legislation relating to the trade in African Elephant ivory. The table on page 60 and accompanying notes provided by the Secretariat (Ivory Notification No. 50, 15 August 1990) summarise information from the 55 Parties, three dependent territories and three non-Parties\* that responded to the questionnaire. The notes serve as a guide. For specific information, consultation with the relevant Management Authority is recommended.

### Notes to accompany table on page 60

AUSTRALIA prohibits the import of ivory (including hunting trophies) except ivory which is imported for non-commercial purposes and for which a pre-Convention certificate has been issued in accordance with Article VII, paragraph 2, by the CITES Management Authority (or other competent authority, in the case of non-Parties) of the exporting country. A re-export certificate (or pre-Convention certificate, depending on the case) may be granted for ivory shown to have been imported legally into Australia before 28 August 1989, and for which the potential importing country has given permission for import.

AUSTRIA grants import permits for hunting trophies in accordance with Resolution Conf. 2.11 for specimens from countries of origin with a "working management programme". Import permits are required for pre-Convention specimens, as per stricter domestic regulations. For Austria, the date of acquisition of a specimen, referred to in Resolution Conf. 5.11, is the date of introduction into personal possession of the applicant. The 2nd and 3rd points of paragraph c) of the Resolution are not applied in the case of re-exports.

BELGIUM requires each import permit application to be reviewed by its Scientific Committee, which takes into account the status of elephant populations in the country of origin, the nature conservation policies applied there, and the purpose of the import (although this procedure is rarely applied to tourist souvenirs). In practice, the re-export of hunting trophies arises only in cases where they are part of the personal belongings of an individual moving from Belgium. A pre-Convention certificate may be issued for the re-export of a specimen acquired before 1 January 1984, provided proof is given that the specimen was imported prior to that date (including from countries of origin that were CITES Parties at the time) or, depending on the case, was legally imported and declared (before 18 April 1990) in an obligatory inventory. Paragraph h) of Resolution Conf. 5.11 is not applied to the re-export of specimens legally imported. Internal sales of raw ivory are not prohibited, but each transaction must be covered by a certificate.

CANADA does not exempt personal or household effects made of ivory or pre-Convention ivory from the usual permit requirements, however, it is still possible to import/re-export such items, in accordance with the provisions of Article III, paragraphs 3 and 4.

CHILE allows the import, as personal effects, of hunting trophies that were legally obtained in a country with an approved quota and acquired by the owner in the exporting country. New regulations were to be introduced on 30 June 1990 prohibiting the re-export of tourist souvenirs and other ivory products. Confirmation of their introduction is pending.

CYPRUS allows the import of personal or household effects for persons returning there for permanent residence.

DENMARK permits the import of hunting trophies only from Botswana, Cameroon, Congo, Ethiopia, Namibia, South Africa, United Republic of Tanzania, and Zimbabwe. Antiquities and musical instruments may be imported under the provisions of Article III, paragraph 3. Denmark permits the re-export of hunting trophies, tourist souvenirs and other ivory for non-commercial purposes only, in accordance with Article III, paragraph 4. Denmark does not allow the import or re-export of personal or household effects acquired after February 1976, and no pre-Convention ivory, with the exception of antiquities/musical instruments noted above. However, special dispensation may be obtained for personal or household effects acquired before February 1976.

ETHIOPIA allows the import of personal effects made of ivory provided an import permit, and any other necessary documentation, has been obtained.

continued over ...

KEY

- Y = yes
- N = no
- = not applicable
- x = likely to change in foreseeable future
- ? = no response given, or response pending
- \* = see notes accompanying table

IMPORT REGULATIONS

- All imports prohibited?
- Imports of hunting trophies allowed?
- Imports of tourist souvenirs allowed?
- Imports of other ivory allowed?

EXPORT/RE-EXPORT REGULATIONS

- All exports/re-exports prohibited?
- (Re-)exports of trophies allowed?
- (Re-)exports of souvenirs allowed?

ARTICLE VII EXEMPTIONS APPLIED TO ...

- Personal or household effects?
- Pre-Convention ivory?

RESOLUTION CONF. 5.11 APPLIED ...

- In all its provisions?
- Paragraphs NOT applied:

PROHIBITS INTERNAL SALE OF ...

- Raw ivory?
- Worked ivory?

CITES PARTY (\* NON-PARTY)

AUSTRALIA	N	N*	N*	-	N	Y	Y	N	N	Y	-	N	N
AUSTRIA	N	Y*	N	N	N	Y	Y	N	N	N*	-	N	N
BELGIUM	N	Y*	Y*	-	N	*	Y	N	N	N*	a, c, d, g	N	N
BRAZIL	N	Y	Y	-	N	Y	Y	N	N	N	c, h	N	N
BURKINA FASO	Y	-	-	-	Y	-	-	N	N	N	-	Y	Y
CAMEROON	N	Y	Y	-	N	Y	Y	N	N	N	-	Y	Y
CANADA	N	Y	N	-	N	Y	Y	N	N	N	-	Y	Y
CHILE	N	Y*	Y	-	N	N	Yx	N*	N*	*	-	N	N
CONGO	N	Y	Y	-	N	N	Y	Y	Y	Y	-	N	N
CYPRUS	N	Yx	Yx	Yx*	N	N	N	Yx	N	?	?	Y	N
DENMARK	N	Y*	N	Y*	N	Y*	Y*	N*	N*	Y	-	Y	N
DOMINICAN REPUBLIC	N	Y	Y	-	N	Y	Y	Y	Y	Y	-	Y	N
ETHIOPIA	N	Y	Y	Y*	N	Y	Y	N	Y	N?	a, c?	Y	N
FEDERAL REPUBLIC OF GERMANY	N	Y	N	Y*	N	Y	Y	N*	N*	Y	-	Y	Y
FINLAND	Y*	-	-	-	N	N	N	N	Yx	N?	e?	N	N
FRANCE	N	Y	N	Y*	N	Y	N	N	N	Y	-	N	N
GABON	Y	-	-	-	Y	-	-	N	N	Y	-	Y	Y
GHANA	N	N	Y?	-	N	N	Y	N?	N?	Y	-	N	N
GUINEA	N	?	Y	-	Y?	?	Y?	Yx?	Yx?	?	?	Y	N
HUNGARY	N	Yx	Yx	-	N	Yx	Yx	Y	Yx	Y	-	Y	N
INDIA	N*	-	-	-	N*	-	-	Y	N	Y	-	N	N
INDONESIA	N	Y	Y	-	N	Y	Y	Y	Y	Y	-	N	N
ISRAEL	N	Y	Y	N	N	Y	Y	Y	Y	?	?	N	N
ITALY	N	Y	Y	Y*	N	Y	Y	N	N	N	b, c, g, h	N	N
JAPAN	N	N	N	Y*	N	N	Y	Y	N*	Y*	-	N	N
KENYA	N	N	N	Y*	N	N	N	N	N	Y	-	Y	Y
LIBERIA	Y?	-	-	-	Y?	-	-	Yx	N	N	b?	Y	Y
LIECHTENSTEIN	N	Y*	N	Y*	N	N	Y	N	Y	N*	h	N	N
LUXEMBOURG	N	Y	N	Y*	N	Y	N	N	N	N*	*	N	N
MADAGASCAR	Y	-	-	-	Y	-	-	-	-	-	-	Y	Y
MONACO	N	Y	N	Y*	N	Y	N	N	N	Y	-	N	N
MOROCCO	N	N	N	N	N	N	Yx*	Y	Y	Y	-	N	N
MOZAMBIQUE	N	Yx	Yx	?	N	Y	Yx	N?	N?	Y	-	N	N
NETHERLANDS	N	N	N	Y*	N	Y*	Y*	N*	N*	Y	-	N	N
NEW ZEALAND	N	N*?	N*	-	N	Yx	Y	N	Y*	Y	-	N	N
NIGER	Y	-	-	-	Y	-	-	-	-	Y	-	Y	Y
NIGERIA	Y	-	-	-	Y	-	-	N	N	-	-	N	N
NORWAY	N	N	N	-	N	N	N	Y	Y*	Y	-	N	N
PHILIPPINES	N	Y	Y	Y*	N	Y	Yx	Y	Y	Y	-	Y	Y
PORTUGAL	N	Y	N	Y*?	?	?	N	Y	N*	Y	-	N	N
SENEGAL	N	Yx	Yx	Y*	N	Yx	Yx	Y	Yx	?	?	Y	N*
SINGAPORE	N	Y	Y	N	N	Y	Y	Y	Y	N	c, h	N	N
SOUTH AFRICA	-	-	-	-	-	-	-	Y	Y	Y	-	N	N
SPAIN	N	Y*	N	Y*	N	Y*	Y*	Y	N	Y	-	N	N
SURINAME	N	Y	Y	-	N	Y	Y	N	N	Y	-	N	N
SWEDEN	N	N	N	Y*	N	N	N	N*	N*	Y	-	N	N
SWITZERLAND	N	Y*	N	Y*	N	N	Y	Y	Y	N*	h	N	N
THAILAND	N	Yx	Yx	Y*x	Y	-	-	Yx	Yx	N	a, b, c, e, f, g	N	N
TRINIDAD AND TOBAGO	N	Y	Y	Y*	N	Y	Y	Y*	Y*	Y	-	N	N
UNITED KINGDOM	N	Y	N	Y*	N	Y	N	Y	N*	Y	-	N	N
@ HONG KONG	-	-	-	-	-	-	-	Y*	N	Y	-	Y*	Y*
@ ISLE OF MAN	Y	-	-	-	N	Y	Y	N	N	?	?	N	N
@ ST. HELENA	N	Y	Y	Y	N	Y	Y	Yx	Y	?	?	N	N
UNITED STATES OF AMERICA	N	Y*x	N	-	N	N	Y	Y*x	Y*x	Y	-	N	N
VANUATU	N	N	Yx	-	N	Yx	Yx	N	N	Y	-	Y	N
ZAIRE	?	-	-	-	N	N	Y	N	N	N*	ALL	N	N
ZAMBIA	-	-	-	-	-	-	-	N	N	Y	-	Y*	N
ZIMBABWE	-	-	-	-	-	-	-	N	N	Y	-	N	N
* MAURITANIA	Y	-	-	-	Y	-	-	-	-	-	-	Y	N
* SIERRA LEONE	Y*	-	-	-	Y*	-	-	-	-	-	-	Y	Y
* UGANDA	Y?	-	-	-	Y	-	-	N	-	-	-	Y	Y

The FEDERAL REPUBLIC OF GERMANY allows the import of antiques, and pianos for repair of their non-ivory parts by the manufacturer (the pianos must be re-exported immediately after repair). Under EEC law, the importation from non-EEC countries of pre-Convention ivory for commercial purposes is forbidden. Under FRG law, any ivory import, whether commercial or not, requires an additional national permit. Such a permit will be issued for commercial purposes only in the case of antiques, and only if the future sale of the antique is covered by an exemption from the FRG general sales prohibition on ivory. National legislation requires that import/export permits be obtained for personal or household effects. Pre-Convention certificates will be issued for imports/exports of personal or household effects only if the requirements of Resolution Conf. 5.11 have been met.

FINLAND is applying an administrative procedure whereby applications to import ivory are refused, in advance of the possible implementation of stricter legislation later in 1990. The current pre-Convention exemption will be reconsidered later this year.

FRANCE allows the import of personal or household effects in accordance with Article III, paragraph 3, and pre-Convention ivory in accordance with Resolution Conf. 5.11. Import of ivory acquired before 18 January 1990 is possible only if the purpose of import is non-commercial, except in the case of antiquities more than 100 years old. Upon presentation of certain documentation, authorisations may be given to French citizens returning to France after residing abroad, for small quantities of worked ivory held in personal possession for several years. The length of the stay abroad, particularly in African Elephant range states, is one of the factors taken into account.

GHANA permits the export of tourist souvenirs and other articles made of ivory if there is proof the ivory was acquired before 1983, and has been registered with the Department of Game and Wildlife.

HONG KONG was the beneficiary of a reservation entered by the UK on its behalf, for a period of six months ending 17 July 1990. Hong Kong had nonetheless adopted a voluntary moratorium on all commercial imports of raw and worked ivory (on 16 June 1989 and 18 November 1989, respectively). Since October 1989, Hong Kong has required licences for the possession of both raw and worked ivory. Domestic regulations with respect to personal or household effects, stricter than required under CITES, came into effect on 17 July 1990. Hong Kong residents must obtain an import permit to import worked ivory weighing in excess of 1 kg as personal effects, for non-commercial purposes. An import permit is not required to import worked ivory less than 1 kg, under the Article VII exemption. Similarly, Hong Kong residents must obtain a re-export certificate to export personal effects of worked ivory in excess of 5 kg, subject to the prior grant of an import permit. Visitors who purchase any amount of ivory in Hong Kong for personal, non-commercial use, are required to obtain an import permit from their country of usual residence, as well as a re-export certificate, before being allowed to take it out of Hong Kong.

HUNGARY expects to introduce new regulations with regard to ivory imports and re-exports, on 1 July 1990 (awaiting confirmation). Personal or household effects and pre-Convention ivory may be imported/re-exported, but only with valid CITES permits and certificates.

INDIA only allows the import/re-export of personal or household effects made of ivory.

ITALY allows the import, in accordance with Article III, paragraph 3, of antiques made of ivory, on the condition that the ivory was legally acquired, either in conformance with Article IV or as pre-Convention stock. Italy allows the import/re-export for non-commercial purposes only of personal or household effects and other ivory (i.e., tourist souvenirs) acquired while the African Elephant was listed in Appendix II or III (i.e., from 20 February 1976 to 17 January 1990). Although an import permit is not required for such specimens, a re-export certificate is needed for re-exports. Ivory certified as having been acquired prior to 20 February 1976 is exempt from the usual permit requirements, in accordance with Article VII, paragraph 2.

JAPAN allows the import, in accordance with Article III, paragraph 3, of ivory specimens for scientific purposes. An import permit is required to import pre-Convention specimens. Raw and worked African Elephant ivory acquired before 1 July 1975 is considered as pre-Convention stock.

KENYA allows the import and export of personal effects made of ivory, for non-commercial purposes only, in accordance with Article III, paragraph 3.

LIBERIA intends to withdraw the current exemption for personal or household effects by about October 1990. It does not apply the provisions of Resolution Conf. 5.11, paragraph b) "in order to avoid problems with specimens from other sources not properly documented".

LIECHTENSTEIN applies the same regulations as SWITZERLAND.

LUXEMBOURG allows the import of ivory as components of musical instruments, antiquities and personal or household effects in accordance with Article III, paragraph 3. With effect from 19 December 1989, Luxembourg does not issue import permits for raw or worked African Elephant ivory, with few exceptions, whether pre-Convention ivory or not. Re-export certificates may be issued for raw or worked ivory which entered Luxembourg legally before 19 December 1989.

MONACO has the same regulations as FRANCE, with which it shares a customs union.

MOROCCO expects to introduce new regulations during the course of 1991 which will prohibit the re-export of tourist souvenirs and other products made of ivory.

The NETHERLANDS allows the import of ivory antiques certified as being more than 100 years old, and household effects, in the case of removals, but only with valid CITES documents. Hunting trophies, souvenirs and other products made of ivory that are household effects or antiques may be re-exported with valid CITES documents (i.e., pre-Convention or re-export certificates, depending on the case).

NEW ZEALAND allows the import of pre-Convention hunting trophies and other ivory (it is unclear whether full CITES permits are required, or whether the Article VII exemption is applied; note from Secretariat). New Zealand presently allows the re-export of hunting trophies in accordance with Article III, paragraph 4, but this will be prohibited when domestic legislation is amended in October 1990.

NIGERIA does not prohibit the internal sale of raw or worked ivory, provided it originates from mature elephants.

NORWAY restricts the exemption under Article VII, paragraph 3, to personal effects normally used during travels; it also interprets Article VII, paragraph 2, strictly, requiring proper documentation.

The PHILIPPINES allows the import, for non-commercial purposes, of icons made of ivory.

PORTUGAL allows the import/re-export of pre-Convention ivory, but requires that CITES permits be obtained for such specimens.

SENEGAL allows the import of worked ivory, in addition to tourist souvenirs, for non-commercial purposes only. It intends to introduce new regulations towards the end of June 1990, which will prohibit the import of all ivory, even for non-commercial purposes (to be confirmed). The new regulations will also prohibit the export/re-export of hunting trophies, tourist souvenirs, and other objects made of ivory, and will eliminate the current exemption for pre-Convention ivory. The sale of worked ivory is not prohibited, however it will be under the revised regulations.

SIERRA LEONE, a non-Party, applies an administrative procedure whereby it does not grant licences to trophy dealers, in order to discourage trade in ivory. Technically, though, the Wildlife Conservation Act of 1972 does allow for trade in trophies, with licences.

SINGAPORE only allows the re-export of ivory registered there in 1986 under the Ivory Trade Control System.

SOUTH AFRICA's voluntary moratorium on imports and exports of ivory will be in effect until 31 December 1990.

SPAIN allows the import of hunting trophies from certain (unspecified) countries, and antique ivory more than 100 years old. Hunting trophies imported before 18 January 1990 may be re-exported for non-commercial purposes only, in accordance with Article III, paragraph 4; trophies imported after that date cannot be re-exported. Spain allows the re-export of tourist souvenirs for non-commercial purposes (in accordance with Article III, paragraph 4) if it is proven that they were imported previously in conformance with the provisions of the Convention.

SWEDEN allows the import/re-export of personal or household effects and pre-Convention ivory that is accompanied by a CITES permit.

SWITZERLAND allows the import of hunting trophies only from: Botswana, Malawi, Namibia (except Kaokoveld), South Africa and Zimbabwe (one elephant per hunter and year). Exceptional authorisations may be granted for household goods, antiquities and pre-Convention (i.e., pre-26 February 1976) ivory; and specimens imported before 3 May 1985 (date of adoption of Resolution Conf. 5.11), in accordance with the provisions of the Convention regarding Appendix II specimens, into Parties which at that time exercised effective controls on the importation of raw and worked ivory. Re-export certificates may be issued for legally acquired ivory provided there is an import permit from the destination country (does not apply to household goods and pre-Convention specimens).

THAILAND currently allows the import of ivory jewellery, in accordance with Article III, paragraph 3 (in addition to hunting trophies and tourist souvenirs made from ivory). It expects to introduce new legislation to prohibit the import of all of these specimens.

TRINIDAD and TOBAGO allows the import for non-commercial purposes of all readily recognizable forms of ivory if the conditions of Article III, paragraph 3, have been met, after consultation with the Management Authority of the State of origin. Exemptions under Article VII will be granted on a case by case basis after consultation with the relevant Management Authority of the State of origin.

UNITED KINGDOM allows the import of pre-Convention ivory specimens for non-commercial purposes only. They are not exempt from the usual permit requirements, however. Each application is considered on its merits, and pre-Convention status alone does not necessarily qualify the item in question for a permit. Personal or household effects may also be imported/re-exported, and are exempt from the usual permit requirements. The internal sale of ivory is controlled by European Community Regulation No. 3626, Article 6 (which prohibits, *inter alia*, the sale of Appendix I specimens, although exemptions may be granted for certain specimens). The UK had entered a six-month reservation on behalf of Hong Kong to permit the re-export of ivory legally imported into that territory. The reservation expired on 17 July 1990.

UNITED STATES OF AMERICA allows imports of hunting trophies for non-commercial purposes only from countries having submitted an export quota to the CITES Secretariat, and for which the import will enhance the survival of the species (at present, issuance of import permits may be limited to Zimbabwe and South Africa). No worked ivory imports are allowed, including tourist souvenirs. Personal or household effects may be imported and are exempt from normal permit requirements only if they were originally acquired in the USA and are part of a shipment being returned there; those acquired outside of the USA are prohibited. Personal or household effects being re-exported from the USA are exempt from the normal permit requirements, however they must be registered with the US Customs Service prior to re-export if they are to be returned to the USA at a later time. Antique ivory may be imported only if it can be proven to be more than 100 years old, and has not been repaired using ivory after 2 April 1977. Pre-Convention worked ivory is exempt from the normal permit requirements, but only for re-exports; a pre-Convention certificate is required. Domestic regulatory changes that are not due to take effect for at least nine months (to allow for public comment) may result in the reclassification of all African Elephant populations -- except those of Zimbabwe, Botswana and South Africa -- as 'endangered'. Under the proposed changes, imports of hunting trophies would be allowed only from non-endangered populations; commercial exports, including of pre-Convention ivory, would not be allowed. Re-exports of antiques would still be allowed with appropriate documentation of age. The current personal or household effects exemption would be eliminated completely, and the import/re-export of such specimens would be prohibited.

VANUATU foresees changes in its domestic regulations pertaining to imports of tourist souvenirs, and re-exports of hunting trophies, tourist souvenirs and other ivory, to be confirmed to the Secretariat.

ZAMBIA has implemented a voluntary moratorium on imports and exports of ivory for an indefinite period. A temporary ban on the internal sale of raw ivory has been in force since June 1989.

ZIMBABWE does not permit the import of ivory.

## STOP PRESS

The CITES Secretariat has announced that China has withdrawn its reservation on the listing of the African Elephant in CITES Appendix I (effective 11 January 1991).



## Sea Turtle Utilisation Bans

### MEXICO

On 28 May 1990, Mexico imposed a complete and indefinite closed season on the utilisation of sea turtles within its national jurisdiction.

Co-operative commercial and industrial fishermen had until 12 June 1990 to inventory their existing stocks of sea turtle products and by-products with the Department of Fisheries. Marketing of these products may take place under strict conditions until stocks are depleted.

### ECUADOR

On 31 July 1990, Ecuador afforded complete protection to all species of sea turtles occurring in its waters and prohibited the capture, processing, and internal and overseas trade in these animals.

*Sources: Diario Oficial, 31 May 1990  
Charles Darwin Foundation for the Galapagos Isles*



## Specific Reservations and Export Controls

Cuba has entered reservations with regard to Green Turtle Chelonia mydas and Hawksbill Turtle Eretmochelys imbricata, effective 19 July 1990.

Italy has entered reservations, effective 2 May 1990, with regard to Vulpes vulpes griffithi, V.v. montana, V.v. pusilla and Stoat Mustela erminea, included in Appendix III at the request of India.

Singapore has withdrawn its reservations with regard to Saltwater Crocodile Crocodylus porosus and New Guinea Crocodile Crocodylus novaeguineae novaeguineae, effective 31 August 1990.

Sudan has withdrawn its reservation with regard to the Nile Crocodile Crocodylus niloticus, effective 26 April 1990.

### Indonesia

The Management Authority of Indonesia has informed the CITES Secretariat that, since 1 January 1990, the export of raw skins has ceased.

### Argentina

The Management Authority of Argentina, through Resolution No. 1/90 of 5 January 1990, has established that from 8 January 1990, export permits concerning species (live animals as well as parts and derivatives) listed in CITES Appendices, have a time validity of 90 days from the date of issuance.

*Source: CITES Secretariat, Notification to the Parties,  
Nos. 593/591/596*

## Dutch Bulbs to be Labelled

The Dutch flower bulb industry and international environmental organisations have reached an historic agreement designed to preserve threatened or endangered plant species currently harvested from the wild.

On 24 May 1990, the Dutch Commodity Board for Ornamental Horticultural Products announced that an arrangement for labelling bulbs would be enforced to inform consumers of the origin of bulbs offered for sale worldwide by the Dutch.

The agreement, which applies only to flower bulbs exported by Dutch bulb companies, was reached at a meeting of growers, plant health authorities and exporters with representatives of the Natural Resources Defense Council, TRAFFIC USA, and the Flora and Fauna Preservation Society.

The labelling schedule, which will be introduced in three stages commencing in July 1990, is as follows:

- 1) With the July 1990 selling season, flower bulbs harvested from the wild will be labelled as such on the packaging.
- 2) From July 1992, cultivated minor bulb plants will bear labels of origin and will be marked as having been grown from cultivated stock.
- 3) By July 1995, major cultivated bulb varieties will be marked as having originated from cultivated stock.

These measures have been introduced in the light of growing concern about the depletion of certain bulb species from the wild, principally those harvested in Turkey.

The Dutch have initiated an additional measure by setting up a monitoring system for Galanthus spp. imported into the Netherlands during 1990.

*Source: Netherlands Flowerbulb Information Center  
Press Release, 24 May 1990*

## Paraguayan Skins Sale

The hunting and trade in wildlife has been banned in Paraguay since 1975, with the exception of certain snakes.

On 22 August 1989, the Government of Paraguay passed a Resolution (No. 393) to allow the sale of 35 236 caiman skins and 3480 Greater Rhea Rhea americana skins which had been seized by the authorities. These skins were reportedly purchased from the Ministry of Agriculture by a Mr Lorenzo Mario D'Ecclesiis Vergara for US\$38 716.

On receiving this information from a trader, the CITES Secretariat and TRAFFIC South America requested confirmation from the authorities in Paraguay. On receiving no response, the Director of TRAFFIC South America, Juan Villalba-Macías, visited the CITES Management Authority in Paraguay, requesting to view the skins in question. Villalba-Macías was told that a quantity of skins was being held in storage but was not of the quantity cited; he also learned that documentation to prove the seizure of any skins was not available, or did not exist.

Villalba-Macías called a press conference to officially protest to the Paraguayan authorities for their part in the illegal deal. The conference had a huge impact and was widely publicised in the media.

Following this event, the President of the Republic of Paraguay has dismissed two army Generals for their part in the illegal trade of skins. The Minister of the Ministry of Agriculture has resigned and, on 15 August, a new Minister was appointed.

*Source: TRAFFIC South America*

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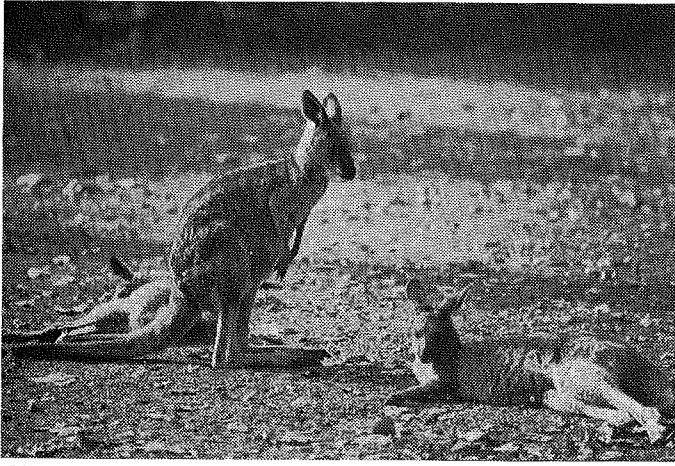
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## Kangaroo Quotas for 1990

In April, the Australian federal Minister for the Arts, Sport, the Environment, Tourism & Territories, Mrs Ros Kelly, announced the approval of kangaroo management programmes for New South Wales, South Australia, Western Australia and Queensland, together with the 1990 commercial kangaroo harvest quotas.

Mrs Kelly is quoted in a press release as saying "Overall, this year's combined quota for the four states represents an increase of 10.5% over last year's, reflecting continued population increases. These increases result from continued favourable environmental conditions prevailing throughout most Australian rangelands, particularly in eastern Australia."

The approved quotas are as follows:-

	<u>1989</u>	<u>1990</u>
<b>South Australia</b>		
<u>Macropus rufus</u>	260 400	276 300
<u>Macropus fuliginosus</u>	33 000	36 850
<u>Macropus robustus</u>	16 500	16 500
<b>TOTAL</b>	<b>309 900</b>	<b>329 650</b>
<b>Western Australia</b>		
<u>Macropus rufus</u>	290 000	290 000
<u>Macropus fuliginosus</u>	45 000	45 000
<u>Macropus robustus</u>	10 000	10 000
<b>TOTAL</b>	<b>345 000</b>	<b>345 000</b>
<b>New South Wales</b>		
<u>Macropus rufus</u>	487 000	625 000
<u>Macropus giganteus</u>	222 000	394 000
<u>Macropus fuliginosus</u>	95 000	152 000
<u>Macropus robustus</u>	1 000	10 000
<b>TOTAL</b>	<b>805 000</b>	<b>1 182 000</b>
<b>Queensland</b>		
<u>Macropus rufus</u>	480 000	480 000
<u>Macropus giganteus</u>	1 500 000	1 500 000
<u>Macropus robustus</u>	100 000	80 000
<u>Macropus parryi</u>	50 000	50 000
<b>TOTAL</b>	<b>2 130 000</b>	<b>2 110 000</b>
<b>GRAND TOTAL</b>	<b>3 589 900</b>	<b>3 966 650</b>

Source: TRAFFIC Oceania

## Wild Musk Deer Harvested in China

The harvesting of wild musk deer for musk for commercial trade is prohibited in China unless special permission is obtained from the authorities. Notwithstanding this, a recent survey has shown that populations of the Alpine Musk Deer Moschus chrysogaster sifanicus in Qinghai Province, on the border with Tibet, continue to decline as a direct result of poaching.

Research aimed at developing improved conservation strategies for the Alpine Musk Deer in Beizha Forest, Qinghai, was initiated in autumn 1989 by Rich Harris, a Ph.D. student at the University of Montana, USA. The survey found that the species is still being heavily exploited in this region, mostly by Moslem Salar people, many of whom are employed in the forests as loggers or road construction labourers. Wire snares are used, and local deer populations can be nearly extirpated by a few Salar, working under the cover of night. Their activities are generally known, but neither local Tibetan people, nor the security authorities are willing or able to take action to discourage them. Some harvesting is also carried out to a lesser degree by local Tibetan people, but is mostly accomplished using firearms. Both types of harvesting have increased markedly in the past few years due primarily to the recent increase in the price of musk paid to the producer in China.

The Alpine Musk Deer is common in some local areas; Harris' team made a total of 161 Musk Deer observations during the study period and will resume fieldwork in September 1990.

Source: R. Harris *in litt.* to M. Green, 6 February 1990.

## China Loans Pandas to Singapore

China is pressing ahead with the loan of Giant Pandas Ailuropoda melanoleuca to zoos for exhibition purposes, despite strong opposition from conservationists.

Two specimens will be flown to Singapore in October and will go on display for three months, according to Mr Song Huigang of the China Wildlife Conservation Association. Such business earns valuable hard currency for China: a 100-day loan of an animal can fetch more than US\$400 000.

In September 1988, the Chinese Government suspended all Giant Panda loans to the USA, following protests from the conservation community over the loan of two Giant Pandas to Toledo Zoo; the animals were subsequently returned to China (see Traffic Bulletin, 10(2/3):21).

## Panda Skin Traders Executed

Two people have been executed in Guangdong province, south-west China, for trading in Giant Panda skins.

One had bought four skins and sold three to a smuggling ring and the other had bought and re-sold three skins, for which they earned about £2700 (US\$4860).

Sources: South China Morning Post, 17 July 1990;  
The Daily Telegraph (UK), 27 April 1990

## Cat Skin Trade in Kathmandu, Nepal

### Introduction

In November 1988, Larry J. Barnes carried out a brief study of the overt fur trade in Kathmandu, Nepal. He and a companion posed as a couple interested in purchasing a fur coat, and visited 36 out of a total of 50 fur-selling shops in the tourist areas of the city. They collected data on the numbers and types of garments made from the skins of four species of cats: Leopard Cat *Felis bengalensis*, Leopard *Panthera pardus*, Clouded Leopard *Neofelis nebulosa* and Snow Leopard *Panthera uncia*, all of which are listed in CITES Appendix I and, with the exception of the Leopard, are fully protected under Nepal's National Parks and Wildlife Conservation Act of 1973. Subsequent visits from December 1988 to March 1989 yielded additional information on fur prices and smuggling techniques. Furthermore, information was collected on articles made from Jungle Cat *Felis chaus*, Fishing Cat *Felis viverrina*, Desert Cat *Felis libyca* and Wolf *Canis lupus*. The following information has been extracted from the report of the study.

### Methods

The survey focused on Thamel and Durbar Marg, the main tourist areas of Kathmandu, where about 50 fur-selling shops were operating. For each shop visited the number of coats, hats and other fur garments was recorded. Coats made up of fur scraps and strips were recorded as "pieces"; coats made out of ventral or dorsal and lateral portions of skins as "whole", and either as full length or half length (three-quarter length coats were included with half length coats).

### Results

During the first survey, 31 of the 36 stores visited were selling at least one garment made from Leopard Cat, Leopard, Clouded Leopard or Snow Leopard. However, some of the shops that did not display these species during the initial survey were found on the second visit to stock such furs when these were specifically asked for; if these were not on the premises, the couple was told to return the following day.

In all, 87 fur coats, ranging from half to full length, were seen, 69% of which were from Leopard Cats. The second most common species being offered for sale was Leopard, which made up 22% of coats seen. Least abundant, at 4.6% each of garments seen, were Clouded Leopard and Snow Leopard coats. These figures represent approximately 700 to 1000 Leopard Cats, 70 Leopards, 40 Clouded Leopards and 12 Snow Leopards. The number of coats made from Wolf, Desert Cat, Jungle Cat and Fishing Cat were not counted. However, coats made from Wolf skins were about as common as those of Leopard Cat and coats made from Desert Cat skins were even more frequently seen. Jungle Cat coats were found in about half of the fur shops and Fishing Cat coats in less than ten.

### Trade routes and smuggling techniques

Although some of the workers in the fur shops were Nepalese, most were Kashmiri. As far as could be determined from interviews with shop keepers, fur garments are tanned and sewn in Srinagar in Kashmir, India. However, it was not possible to determine the origin of the animals; the merchants' statements were highly unreliable, usually claiming that the animals were

Table 1: Total number of cat skin garments offered for sale in Kathmandu

Skins	Leopard Cat	Leopard	Clouded Leopard	Snow Leopard
Total	60	19	4	4
% of coats	69	22	4.6	4.6
Hats	8	31	1	2
Other	1 (stole)	2 (gloves)	0	0

from Nepal, probably because they believed that to be what a tourist to Nepal would want to hear. It is the author's belief, however, that the species may come from across the Indian subcontinent, and are certainly not confined to Nepal.

Once the furs are smuggled across the India-Nepal border, they are taken to fur shops in Thamel, Durbar Marg, and inside or in the vicinity of Kathmandu's five 5-star hotels.

The merchants were well acquainted with methods for smuggling furs out of Nepal and openly discussed these. Salesmen offered to sew an artificial fur over the surface of the real coat so that it would appear to be a bulky fake fur coat. Other methods included enclosing the fur inside a pillowcase or sewing a falsified label on the coat to make it appear old and therefore 'pre-CITES'. Only on two or three occasions did merchants state that a protected fur could not be exported.

Table 2: Examples of prices of cat skin coats offered for sale in Kathmandu

Species	Price (US\$)
Snow Leopard	3200
Clouded Leopard (full length)	1200
Leopard Cat	500-1200
Leopard	500-1200

### Discussion

Nepal became a Party to CITES in 1975. Under domestic law, the hunting of Leopard Cat, Clouded Leopard, Snow Leopard and Wolf is prohibited. In India, national protection is given to all 15 cat species which occur there, including Desert Cat, Jungle Cat and Fishing Cat.

The prices for these articles are far beyond the means of most Nepalese nationals; based on interviews with merchants and others familiar with tourism and conservation in Nepal, it is believed that the principal buyers of fur coats derived from protected species are tourists from Japan and the West. Despite these high prices, the fur trade probably contributes minimally to Nepal's economy; most of the profits remain with the Kashmiri merchants and the fur craftsmen in India.

Enforcement of Nepal's conservation laws would not be without difficulties. Police would have to be trained in the difficult task of identifying fur garments and it is safe to assume that bribery and corruption would interfere with confiscations: the monthly salary of a policeman in Nepal is less than US\$50. Amongst several recommendations, the author suggests that an information display should be placed in Kathmandu airport to inform tourists of the prohibitions on trade in endangered species.

The full report, entitled The Overt Illegal Fur Trade in Kathmandu, Nepal, by Larry J. Barnes, may be obtained from 16100 Highway 101 North, Willits, CA 95490, USA.

## Survey of Wildlife Products for Sale in Saudi Arabia

With particular emphasis on rhino horn

Esmond Bradley Martin

### INTRODUCTION

The Kingdom of Saudi Arabia covers about 80 per cent of the Arabian Peninsula, with a total population of about 13 million people, including several million expatriate workers. In addition, and during the annual Hadji period especially, hundreds of thousands of foreign Muslims come on a pilgrimage to Mecca and Medina. Some of these people have, over the past ten years, imported a great variety of wildlife products into Saudi Arabia. These include rhino horn dagger handles, ivory carvings and crocodile skin objects, along with a diverse assortment of live animals for pets: antelope Bovidae, Cheetah *Acinonyx jubatus*, Leopard *Panthera pardus* and even kangaroo Macropodidae. Also, relatively large quantities of raw elephant ivory from the Sudan, and rhinoceros horn from eastern Africa, were imported to Saudi Arabia, in particular Jeddah, during the late 1970s and early 1980s. However, almost none of this horn and ivory remained in the Kingdom, but was re-exported to North Yemen (Yemen Arab Republic)<sup>1</sup> and the Far East (Parker and Martin, 1983 and Martin, 1987).

The present report does not discuss in detail Saudi Arabia's possible position as an entrepôt for wildlife commodities, but instead describes some of the wildlife products and wild animals for retail sale within the Kingdom. The study is based on a survey carried out by Mohamed Altoraf of the National Commission for Wildlife Conservation and Development, and the author, in December 1988, in Riyadh, Jeddah, and a selection of places in the south-west of the Kingdom: Ad Darb, Jizan,

Khamis Mushayt, Najran and Sabya. It is not a comprehensive survey of the country, as the cities in the east of Saudi Arabia were not visited owing to lack of time. However, most wildlife products and exotic pets are sold in the capital, Riyadh, and in the large cities located in the west of the country owing to their close proximity to Africa, from where many of the animals and goods originate.

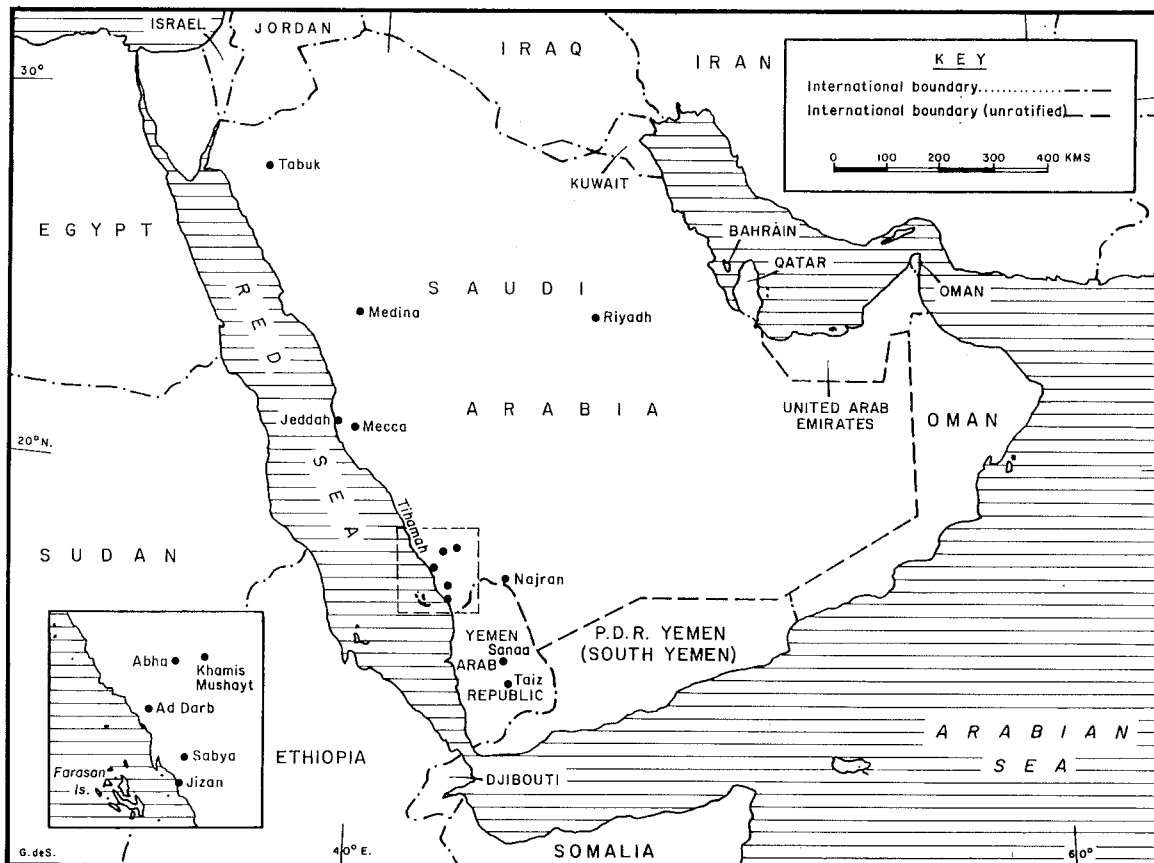
### METHODS

All the main markets and shops selling wildlife products on a retail basis were visited, and interviews were carried out; again, owing to lack of time, some outlets in Jeddah and Riyadh could not be investigated. However, it is considered that the results of the survey provide a general overview of the types of wildlife commodities and exotic pets being sold in Saudi Arabia in late 1988.

### BACKGROUND

There are no published data on the recent wildlife trade of Saudi Arabia. Perhaps the first reasonably detailed survey of Jeddah was carried out in November 1980 by John Grainger, currently employed by the National Commission for Wildlife Conservation and Development. Dr Grainger visited the twelve curio shops on King Khalid Street, the main area where wildlife commodities are sold. He found 13 rhino horns (probably originating from Tanzania) in one shop alone, nine Leopard skins, 24 civet skins, 15 raw African Elephant *Loxodonta africana* tusks, an assortment of Reticulated Python *Python reticulatus* and rock python *Python* sp. skins, snakeskin handbags, worked ivory items, and Giraffe *Giraffa camelopardalis* and elephant hair bracelets. Most of these items originated from Africa

Map of Saudi Arabia showing towns covered by survey



<sup>1</sup>Since this article was written the former North and South Yemen have formed a single Yemen state.

and had been brought by poor African Hadjis, mainly from Sudan, in order to fund their stay in the country. Dr Grainger was told that most of the rhino horn was sold to North Yemenis who took them back to their country to make handles for daggers, or 'jambias', where they are traditionally worn by men as a symbol of manhood. During a survey carried out by the author in the early 1980s, Yemeni traders in Sanaa, North Yemen, confirmed that Jeddah had indeed been a place from where they obtained rhino horn. Dr Grainger believes that perhaps a small amount of rhino horn may have been sold in herbalists' shops in Jeddah, which also offered for sale deer Cervidae antlers, dik dik *Madoqua* sp. horns and dried skinks Scincidae for medicinal purposes (Grainger, 1980 and Grainger, pers. comm., 1988).

Further surveys were carried out in Jeddah by Dr Grainger and Mohamed Altoraiif during the period 1984-1987. By 1986 there were fewer ivory items for sale than previously, and no rhino horn. The managers of the curio shops said that the Hadjis were no longer offering them rhino horn. Still fewer wildlife products were for sale a year later, the reason given for this reduction being the tighter controls enforced by the Sudanese authorities, particularly with regard to rhino horn and elephant ivory. However, antique daggers with rhino horn handles made in the Yemens were being offered for sale in Jeddah; this was also the case in Khamis Mushayt, but nobody was actually carving rhino horn there, as they had been doing in 1985. At Tabuk, a variety of wildlife products made in Thailand was being offered for sale, including ivory carvings, snakeskins, snakeskin purses and crocodile skins (Altoraiif, pers. comm.).

## 1988 SURVEY

### Riyadh:

The main area to find wildlife items in Riyadh is in the Sofat district of Deerah, one of the old sections of the city. Of the nine antique shops visited, five offered daggers with rhino horn handles at prices ranging from US\$750 to US\$1870. Most of these daggers had been brought to Riyadh by Yemenis. Others came from Najran, in the extreme southern part of the Kingdom, where many of the residents are ethnically Yemenis. Most of these daggers are purchased by Bedus and by foreigners, especially Americans and western Europeans. The only other animal products seen in Riyadh were one fox *Vulpes* sp. skin and an Ibex *Capra ibex* horn.

Dr Graham Child, an adviser to the National Commission for Wildlife Conservation and Development, and his colleagues, observed an assortment of unusual wild animals being offered for sale in pet shops in Riyadh, and elsewhere in the Kingdom (see Table 1). Although antelope and gazelle are popular as pets in Saudi Arabia, they are usually caught by wealthy family members or their agents and brought directly to the owners' farms, and do not pass through pet shops. Sudan has been a popular place to capture wild animals for Arabs in Saudi Arabia (Nolte, 1986),<sup>2</sup> and Mali has recently supplied this country with Dama Gazelle *Gazella dama* and Ostrich *Struthio camelus* (Newby, 1989).

There appear to be fewer wildlife products for sale in Riyadh than in Jeddah. Aside from the strategic position of Jeddah to Africa, the source of many of these products, Hadjis rarely go to Riyadh. There is also still a large European and American population in Jeddah who purchase wildlife commodities. The more prestigious hotels in Riyadh, such as the Intercontinental, Sheraton, and Riyadh Palace, sell no wildlife products, which is not the case in Jeddah.

Table 1: Live animals offered for sale in Saudi Arabia in 1988

	Origin	US\$
Dorcas Gazelle <i>Gazella dorcas</i>	Sudan	1336
Mountain Gazelle <i>Gazella gazella</i>		1336
Farasan Gazelle <i>G.g. arabica</i>		1600
Ibex <i>Capra ibex</i>		
Vervet Monkey <i>Cercopithecus aethiops</i>	Côte d'Ivoire	270-455
Hamadryas Baboon <i>Papio hamadryas</i>	Saudi Arabia	535
Dik dik <i>Madoqua</i> spp.	Somalia	600
Llama <i>Lama</i> sp.		535
Sand Gazelle <i>Gazella subgutturosa</i>		270
Ostrich <i>Struthio camelus</i>		
Leopard <i>Panthera pardus</i>		
Kangaroo Macropodidae		4680

Source: Dr G. Child and author

### Jeddah:

Jeddah, being one of the major ports on the Red Sea and the commercial centre of Saudi Arabia, continues to stock the largest selection of wildlife products in the country. Eleven of the 12 curio shops visited in the previous surveys contained wildlife products. Ivory commodities were some of the most common items for sale, the majority having been carved in the Sudan, with a few pieces made in Nigeria and India. The quality of these carvings was the poorest the author has seen anywhere in the world.

Also for sale in these shops were whole snakeskins, and other reptile products (see Table 2) whose quality of workmanship was also very poor, and may explain why the turnover was not brisk.

Antique daggers with rhino horn handles represented one of the few wildlife commodities of quality for sale. These ranged in price from US\$1870 to US\$8000 and were purchased mostly by Yemenis, Omanis and Saudis. Ivory and skins, on the other hand, were mostly purchased by North Americans and Europeans. In one fashionable carpet shop, a well-tanned leopard skin from Afghanistan was on sale for only US\$160, perhaps an indication of the dwindling demand for such items. In 1987, the proprietor of this shop refused two quality leopard skins from a Sudanese trader, because he did not think he could sell them. One particular shop often patronised by Sudanese traders offering ivory and even rhino horn, was offered a horn in 1986 for US\$432 a kg. A few other shops sold wildlife products, mostly from the Sudan, but few products or unusual wildlife was being offered for sale at the old market (souk) and the various pet shops visited.

### South-west:

A survey was carried out in the south-west of the country to ascertain whether the Yemeni population there made rhino horn dagger handles. In Abha, the administrative capital of Asir province and the southern region, there were no workshops making daggers. However, in Khamis Mushayt, 27 kilometres north-east of Abha, and probably the largest city in the south, there were 15 workshops (plus one man working on the pavement), where daggers were being repaired and

<sup>2</sup>Nolte reported that foreign Arabs were offering 1000 Sudanese pounds (US\$430) in 1986 for the export of live specimens of young Ibex and Barbary Sheep *Ammotragus lervia* from the Red Sea Hills of Sudan, and that hundreds of Dorcas Gazelle were officially sold each year from the West Omdurman area, greatly depleting the population.

assembled, and dagger belts being made. Eleven of these establishments, were making and selling dagger belts and five were repairing, assembling and selling daggers. There were also four merchants selling 'jambias' spread out over pieces of cloth on the pavement. The workshops are small, with one or two craftsmen, usually Indians and Yemenis (most of whom are Saudi Arabian citizens). The craftsmen do not import raw rhino horn, but instead bring new and old rhino horn handles already carved and shaped in North Yemen and simply assemble the ready-made handles by fastening them tightly onto dagger blades. The prices of ready-made rhino horn handles varied according to size: the largest one seen in Khamis was US\$1070; older daggers with rhino horn handles sold for between US\$855 and US\$1875. Wood and Water Buffalo Bubalus bubalis horn were also used for handles.

Najran has 27 small 'jambia' workshops which are located in two single-storey buildings, and as stalls next to the buildings. Fifteen of these workshops repair daggers and 12 manufacture dagger belts. Until 1934, Najran was part of North Yemen and consequently more people here (though still less than ten per cent) wear 'jambias', than elsewhere in the Kingdom. Saudis almost never wear daggers of any type today, although a few do still repair old ones to wear, or import new cheap brass daggers from Syria; these are worn in the Khamis Mushayt and Najran areas. As in Khamis Mushayt, no rhino horn dagger handles are actually carved in Najran, but imported, along with blades, from North Yemen. It is not clear whether daggers were actually made in Khamis and Najran over the past few decades. There is no doubt,

however, that daggers are still repaired and assembled in Najran. Most are now made out of Water Buffalo horn imported from India, some of which are inlaid with coins. The quality of the daggers is superior to those in Khamis, with the most expensive rhino horn handles (with silver scabbards) selling for up to US\$5356; the cheapest rhino horn dagger handles sell for US\$400.

In the relatively poor and undeveloped coastal city of Jizan, dhows continue to bring cargoes containing ivory and snakeskin items originating from Sudan, Ethiopia and Somalia. Daggers are not assembled here, although some people, mostly ethnic Yemenis, wear 'jambias' daily. Daggers are assembled in the highlands of North Yemen and Saudi Arabia, areas with a mainly Arab population, not in the coastal zone which has a high African population, originating mainly from Ethiopia.

No wildlife products were seen for sale in the smaller neighbouring towns of Sabya and Ad Darb.

## CONCLUSION

From the survey of the Kingdom's major cities, Saudi Arabia does not appear to be a significant outlet for the retail sale of wildlife species, and it would seem that there were fewer wildlife products for retail sale in 1988 than at the beginning of the decade. Unlike in neighbouring United Arab Emirates, where ivory factories were established in the late 1980s consuming large quantities of raw ivory smuggled out of Africa, no ivory is carved at all in Saudi Arabia. There are, however, still some imports of endangered antelopes and other rare animals and birds from Africa, although most of these are for private collections.

Saudi Arabia is not a Party to CITES and, until 1987, there was no legislation controlling the imports and exports of rare wild animals or their products, aside from general quarantine restrictions. In 1987 the newly created National Commission for Wildlife Conservation and Development initiated a licensing system. From July 1987 to the end of 1988, about 100 import and export permits had been granted, 70% of which were for parrots (mostly African Greys Psittacus erithacus). However, there are at present no real enforcement regulations nor wildlife inspectors, and consequently many people simply avoid applying for licenses to import or export wildlife. To rectify this, the National Commission for Wildlife Conservation and Development has drawn up a comprehensive wildlife bill which will hopefully become law in the near future. Then, the Government of Saudi Arabia may consider joining CITES.

## Acknowledgements

I would like to thank the following organisations and people who made it possible for me to carry out this research in Saudi Arabia: World Wide Fund for Nature, Zoological Society of London, National Commission for Wildlife Conservation and Development, Abdulaziz H. Abuzinada, Mohamed Altoraiif, Graham Child, John Grainger and David Jones.

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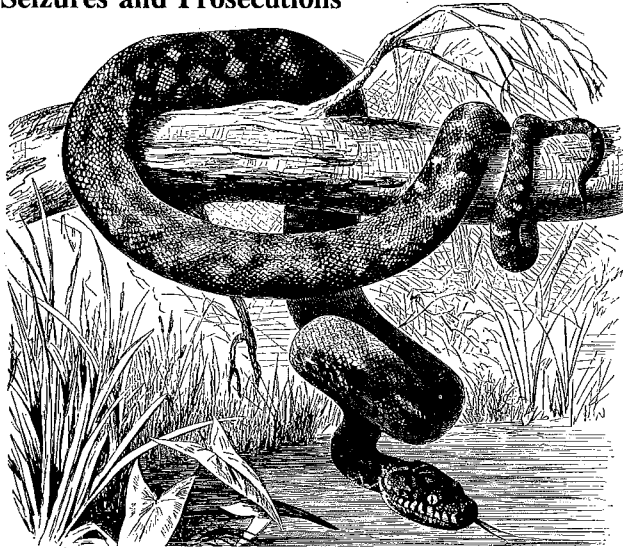
Table 2: Survey of wildlife products in twelve tourist shops on King Khalid Street, Jeddah, December 1988

Commodity	Country of origin	Retail US\$
<b>Ivory:</b>		
Small rings/key chain with carved elephant (4 cm)	Sudan	3
Small ball necklaces	Sudan	13
Plain bangles	Sudan/Nigeria	20-53
Knife (22 cm)	Sudan	27
Old bangles/twisted bangles	India/China	32
Tusk (35 cm) with 6 carved elephants	Sudan	112
Tusk (47 cm) with 8 carved elephants	Sudan	320
Polished tusks (40 cm)	Sudan/Nigeria	120
<b>Reptile products:</b>		
Snakeskin wallets/belts	Nigeria	4-16
Snakeskin handbags	Nigeria	21-75
Whole snakeskin	Nigeria	27
Cobras (stuffed)	Thailand/ Philippines	27-40
Stuffed snake and mongoose display	Thailand	120
Handbags <u>Crocodylus niloticus</u>	Egypt	210
Lizard belts	Egypt	21
<b>Daggers:</b>		
New (plastic handles)	Saudi Arabia	13
New (rhino horn handles)	Saudi Arabia	1070
Antique (rhino horn handles)	N. Yemen/ Saudi Arabia	1870-8000
<b>Misc.:</b>		
Antelope head	Kenya	1176
Buffalo <u>Syncerus caffer</u> skin handbag	Sudan	13
Ibex <u>Capra ibex</u> horn	Africa	53
Serval <u>Felis serval</u> skin	Africa	67
Stuffed crocodile (130 cm)	Sudan	348
Leopard <u>Panthera pardus</u> skin	Afghanistan	160

Source: Survey carried out by the author.



## Seizures and Prosecutions



Diamond Python *Morelia spilota spilota*

### AUSTRALIA

#### Federal:

On 16 March 1990, at Sydney District Court, Wilhelm Furtjes and Gerhard Kamman, both West German citizens, were convicted and sentenced to three months imprisonment for attempting to smuggle birds and eggs into Australia. The two men had pleaded guilty to charges laid under Section 22(b) of the Wildlife Protection (Regulation of Exports & Imports) Act 1982. They had been apprehended on arrival at Sydney airport on 14 December 1989. Four very young birds were found inside a portable cassette radio that Furtjes was carrying. The birds were later identified as two *Charmosyna* spp., and two African Grey Parrots *Psittacus erithacus*. Furtjes was further searched and found to have two viable parrot eggs concealed in a nappy that he was wearing.

\* \* \* \*

On 27 March 1990, at Sydney District Court, Michael Murdian, of F.R. Germany, was convicted and gaoled for two years and eight months on charges under the Wildlife Protection (Regulation of Exports & Imports) Act 1982 and Quarantine Act 1908, plus six months on a false passport charge. The judge directed that he serve a minimum of two years.

Murdian had been apprehended when he arrived at Sydney airport on 10 November 1989, carrying four birds concealed in his jacket. The birds were later identified as two white mutation Rose-ringed Parakeets *Psittacula krameri*, and two lutino Princess Parrots *Polytelis alexandrae*. The birds were estimated to be worth up to A\$100 000 (US\$77 300) on the Australian market.

\* \* \* \*

On 5 April 1990, at Cairns Magistrates Court, Peter Krauss of Queensland was convicted on a charge, under the Wildlife Protection (Regulation of Exports & Imports) Act 1982, of attempted illegal export of a Diamond Python *Morelia spilota spilota*. He was fined A\$750 (US\$580) plus A\$43 costs. Krauss was also charged, under Queensland State law (Fauna Conservation Act), of keeping and moving protected fauna (the same animal) without a licence. He was fined A\$250 plus A\$40 costs on the first charge, and A\$500 plus A\$40 costs on the latter charge. He was also ordered to pay royalties of A\$30. Krauss had been caught in the act of posting a package containing the snake on 20 November 1989. Krauss has previous convictions for fauna offences (see *Traffic Bulletin* 8(1):11 and 10(1/2):12).

#### State:

##### Queensland

On 19 January 1990, Graeme Cutmore of Queensland was convicted at Warwick Magistrates Court on charges, under the Queensland Fauna Conservation Act, of failure to comply with lawful requisition and failure to maintain a register. He was fined a total of A\$1000 (US\$775) plus A\$80 costs on the two charges. Cutmore has previous convictions for fauna offences (see *Traffic Bulletin* 10(3/4):46, for example).

\* \* \* \*

On 20 February and 5 March 1989, respectively, Phillip Williamson and James Watson of Queensland were convicted, at Cairns Magistrates Court, on charges under Queensland State law relating to the taking of Cape Melville palm seeds *Wodyetia bifurcata* from Cape Melville National Park. They were each fined A\$200 (US\$155) plus A\$40 costs. They were also ordered to pay damages of A\$1 per seed; A\$2000 in the case of Williamson, and A\$18 000 in the case of Watson.

\* \* \* \*

On 5 March 1990, at Proserpine Magistrates Court, Philip Need of Queensland was convicted on charges under Section 54(1)(a) of the Queensland Fauna Conservation Act of keeping protected fauna (28 Torresian Imperial Pigeons *Ducula spilorrhoa*) without a permit. He was fined A\$700 (US\$540) plus A\$1260 in royalties. The birds and three incubators were confiscated. Need has several previous convictions for wildlife offences (see *Traffic Bulletin* 11(1):14, for example).

\* \* \* \*

On 15 March 1990, at Wynnum Magistrates Court, Christopher Edwards of Queensland was convicted on charges under Section 62(2) of the Fauna Conservation Act of permitting movement of fauna without a permit (2 Eastern Rosellas *Platycercus eximius* and 1 King Parrot *Aprosmictus scapularis*), and moving fauna without a permit (3 King Parrots, 2 Rainbow Lorikeets *Trichoglossus haematodus*, 1 Red-winged Parrot *Aprosmictus erythropterus*, 2 Red-rumped Parrots *Psephotus haematotus*, 2 Princess Parrots *Polytelis alexandrae* and 2 Crimson Rosellas *Platycercus elegans*). Edwards was fined A\$300 (US\$230), plus A\$43, on each charge.

\* \* \* \*

On 31 May 1990, at Proserpine Magistrates Court, David Neal of Queensland was convicted on charges under sections 54(1)(a) and 62(7) of the Fauna Conservation Act 1974-89 of keeping, taking and moving Protected Fauna. The fauna involved were 4 Carpet Pythons *Morelia spilota variegata*, 5 Children's Pythons *Liasis childreni*, 2 Brown Tree Snakes *Boiga irregularis* and 1 Diamond Python *Morelia spilota spilota*. All the animals were seized and returned to the wild, apart from the Diamond Python which was retained by the Queensland National Parks & Wildlife Service. Neal was placed on a good behaviour bond for six months.

Compiled by TRAFFIC Oceania

## Seizures and Prosecutions ctd.

### BELGIUM

A four-month investigation into the illegal trade in orchids imported into Belgium has culminated in the arrest, in March 1990, of a key European trader in endangered orchids.

At the end of 1989 Belgian Customs officers at Zaventem airport, Brussels, confiscated wild orchids found in airmail packages from Thailand. This led to the start of an investigation, nick-named "Operation Nero-Wolfe", which, with the assistance of TRAFFIC Belgium, uncovered further illegal trade in wild orchids: on 13 February 1990, over 1000 specimens were seized from a number of localities and, in further searches, 700-800 were seized from private collections.

These investigations led to the arrest in Brussels of Hans Hermans, a Dutch national, by the Criminal Investigation Department of the Police working in collaboration with the Customs Investigation Service. Hermans was in possession of some 25 orchids from Madagascar, allegedly a sample of a shipment of 4000 wild orchids illegally imported from Madagascar into F.R. Germany a few days earlier.

Hermans has for a long time been under suspicion for the alleged sale of thousands of plants, mostly wild-collected in Asia and Latin America. To avoid controls, he is reported to have sent the plants through the post, or used forged documents stating that the plants had been artificially propagated.

Charged with circumventing CITES regulations and with forgery, Hermans has been released on bail, awaiting trial.

*Source: TRAFFIC Belgium*

### BRAZIL

A well-known scientist and bird breeder, Jesús Estudillo Lopez, was arrested on 13 February 1990 for attempting to smuggle 22 rare and protected birds out of Brazil.

On the basis of information received from the CITES Secretariat and TRAFFIC South America, the Brazilian Forestry Police of the National Institute for the Environment (IBAMA) arrested Estudillo in Manaus, Brazil, whilst he was boarding a flight bound for Mexico City. In crates checked in with his luggage were: 2 Black-fronted Piping Guans Aburria jacutinga, 6 Greater Razor-billed Curassows Crax mitu mitu, 4 Hyacinth Macaws Anodorhynchus hyacinthinus, 2 Golden Conures Aratinga guarouba, all CITES Appendix I-listed species, 4 Green-winged Trumpeters Psophia viridis, and 4 unidentified parrot species. The only export permit in Estudillo's possession was for 4 captive-bred adult Greater Razor-billed Curassows.

Estudillo, a Mexican national, has been charged with violating Law #7653 of the Fauna Protection Act, a 1988 amendment to Brazilian Wildlife Protection Law of 1967 (Law #5197), which forbids the hunting and export of virtually all native wild species. He was released from custody in late February; it is not yet clear whether he will stand trial.

The birds are currently being housed at the Centro de Criacao Animais Nativas (CECAN), a centre for the captive-breeding of Brazilian species. A new non-governmental organization, Vitoria Amazonica, will be responsible for the care of the birds.

Dr Estudillo has been a respected member of the international scientific and avicultural community, and is one of the world's leading experts on cracids, a group of pheasant-like birds which includes many endangered species, a number of which have successfully bred at Estudillo's breeding centre in Mexico.

*Source: TRAFFIC USA*

### F.R. GERMANY

In February 1990, Walter Sensen, a West German animal dealer, was arrested and charged in Nürnberg, F.R. Germany for violating wildlife trade regulations.

Sensen was charged with exporting three Gorillas Gorilla gorilla from Cameroon to Taiwan in 1987; exporting several Chimpanzees Pan troglodytes and one Mandrill Papio sphinx from Equatorial Guinea to Honduras in 1988; selling a Chimpanzee to Saudi Arabia in 1988; exporting two Gorillas from Equatorial Guinea to Mexico in 1989; and, offering apes Pongidae spp. to persons in Austria, Brazil, Saudi Arabia and Sweden.

Sensen was sentenced to two years imprisonment without probation (the maximum sentence is five years). He was also banned from dealing in animals for a period of five years. This is the first time a gaol sentence has been imposed for violations of the German Nature Conservation Act.

In May 1990, however, at the Court of Appeal, the judge released Sensen on probation, stating that "an animal dealer is used to a free life" and that by trading in baby Gorillas, "Sensen only sold the additional products of the African natives' activities".

Sensen was fined 50 000 DM (US\$30 000) and banned from taking up his business again. Both the defense counsel and public prosecutor have asked for a second appeal hearing.

*Source: TRAFFIC Germany*

### HONG KONG

Ninety-two prosecutions were initiated by the Hong Kong authorities in the second half of 1989 as a result of confiscation of the following items:

Item	Amount
Monkey	2
Slow Loris	
<u>Nycticebus coucang</u>	8
Musk <u>Moschus</u> spp.	6 pods 10.2 g grain
Ivory	raw 769.9 kg worked 123.62 kg
Rhino	horn 20 kg
Cat <u>Felidae</u> spp.	stuffed 1 live 2 skins 226
Pangolin <u>Manis</u> spp.	live 2 scales 0.68 kg meat 5.4 kg meat/scales 1.4 kg/20
CETACEA spp.	meat 0.4 kg
Owl	dead 1 live 6
Bird of prey	stuffed 3 live 2
Parrot	64
Elongated tortoise	
<u>Indotestudo elongata</u>	11
Sea turtle	stuffed 13 eggs 40 shell 1
Lizard	live 1 skins 8231
Crocodile	meat 0.79 kg

*Source: Hansard, 8 May 1990*

## Seizures and Prosecutions ctd.

### HONG KONG ctd.

The following seizures of ivory were made by the special task force of the Customs and Excise Department in Hong Kong between 1 June 1989 and 22 March 1990:

Quantity (kg)		Seized from	Country of Export
58.9	raw	Kim Ki Woo	Korea
15	powder	Au Kin Choi	China
8.5	raw	Tsai Shin Sheng	Taiwan
11.7	worked	abandoned by Choi Don-soo	Korea
7.55	"	Lau Ming Hei	Thailand
0.2	"	Yue Hwa Chinese Product Emporium Ltd	Japan
2.9	"	Lam Kin Pui	Taiwan
7.19	raw	Kwong Fat Cheung Ivory and Mahjong	Japan
700	"	Pei Lei Lai Kai	Singapore
2.3	worked	Andrew Stephen Yuen	Thailand
100	"	Sun Hung Ngai Trading Co.	USA
55	"	Wong Wing Shing	Spain
4	"	unclaimed baggage	France
26.3	"	Art of Sea Ivory Co.	China
3.1	"	Liu Shih Haiao	Taiwan
3.8	"	Shih Shia Loon	Taiwan
1.3	"	Fang Tsu Chick	Thailand
2.5	"	Chang Lin Kuei Chuo	Taiwan
17.5	"	left by transit passenger	Thailand

*Source: Hansard, 8 May 1990*

### INDIA

Wildlife products valued at Rs.2.5 million (US\$140 000) have been seized from Sadar Bazar, in Delhi, India.

Two raids carried out by wildlife officers on 23 February 1990 yielded a total of 360 skins. These included skins of 29 Leopard Panthera pardus (CITES Appendix I), 74 otter Lutra spp., 2 Tiger Panthera tigris (Appendix I), 2 crocodile, 30 Jungle-cat Felis chaus (Appendix II), and 1 Leopard Cat Felis bengalensis (Appendix II), in addition to fox, jackal and civet skins. Thirty kilogrammes of tiger bone were also seized.

\* \* \* \*

At least 15 Saltwater Crocodiles Crocodylus porosus (CITES Appendix II) were recently seized from Thai vessels in Port Blair, Andaman Islands, India. Thirty-five Thai, five Burmese and five Indian nationals were arrested during anti-poaching operations conducted by the army, navy and coastguard forces. The poachers were equipped with underwater photography equipment, arms and ammunition, in addition to sophisticated lamps to hunt the reptiles.

*Sources: Hindustan Times (India), 21 April;  
Nation Mail (India), 3 April 1990*

### ITALY

On 7 March 1990, two missionary nuns arriving at Linate airport, Milan, from Zaire, were stopped by guards of the Forestry Corps, and their luggage found to contain 12 carved elephant tusk tips, 35 ivory statues and about 100 small ivory objects, weighing a total of 17 kg. The ivory, which was not accompanied by CITES documentation, was to be sold for charity; it will now be auctioned by the State.

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### ITALY ctd.

A passenger arriving at Fiumicino airport, Rome, from the USA, on 20 January 1990, was found to be carrying fur coats made from the following cat skins: 2 Leopard Panthera pardus (CITES Appendix I), 1 Cheetah Acinonyx jubatus (Appendix I), and 6 Lynx Felis spp. (Appendix II), one of which was lined with python Python spp., skin. The garments were confiscated and will be used for educational purposes.

\* \* \* \*

After a search by agents of the Italian Forest Corps., 284 birds were discovered in a car which had crossed the border from France. The birds included 24 Red-fronted Parakeets Cyanoramphus novaezelandiae (CITES Appendix I), and had been moved from the Netherlands, bound for Gatteo, near Rimini. The shipment was confiscated for violation of the Finance law covering contraband items.

*Source: TRAFFIC Italy*

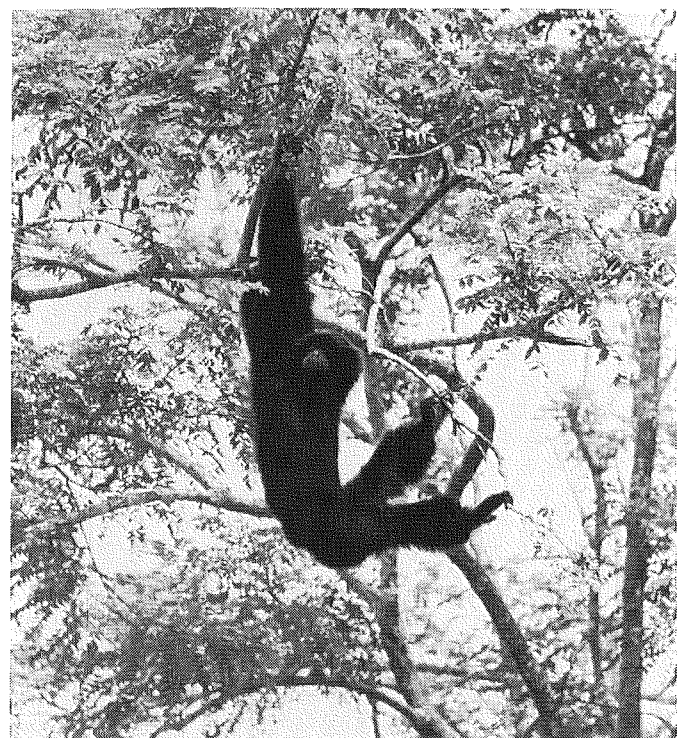
### THAILAND

On 20 February 1990, three wooden crates labelled "live birds" arrived on a Thai International Airways flight at Bangkok, Thailand, in transit via Singapore, for Belgrade, Yugoslavia. On inspection, they were found to contain six juvenile Orang-utans Pongo pygmaeus and two Siamang Gibbons Hylobates syndactylus, both CITES Appendix I-listed species.

The following day, a five-year-old Chimpanzee Pan troglodytes (Appendix I) was discovered in an unlabelled case, travelling from Yugoslavia via Dubai.

The origin of the shipments is unknown. In both cases, the Royal Forest Department was alerted and the animals were confiscated. The Orang-utans had travelled without food or water and were badly dehydrated, two suffering from pneumonia. Experienced volunteers are now caring for the animals. Two people are being sought in connection with the case.

*Source: The WFT Bulletin (Wildlife Fund Thailand), March 1990*



Siamang Hylobates syndactylus

©WWF/Ken Scriven

## Seizures and Prosecutions ctd.

### UK

Adriana Hoffmann, from Chile, attempted to enter the UK at Harwich on 17 July 1990 with approximately 18 CITES Appendix II cactus specimens in her luggage which were not covered by CITES documentation.

Hoffmann appeared at Harwich Magistrates Court on 24 July 1990 and was successfully prosecuted for the attempted evasion of UK import controls. The specimens apparently had no commercial value. A fine of £200 (US\$360), plus £50 costs was imposed.

*Source: H.M. Customs & Excise, UK*

\* \* \* \*

On 10 August 1990, at Maidstone Crown Court, two West German citizens were sentenced to gaol for attempting to export 12 live Peregrine Falcon *Falco peregrinus* eggs from Scotland and Wales.

Helmar Gauder and Lois Wittman were arrested at Dover last April when Customs officers discovered the eggs hidden behind the dashboard of their Mercedes car. The eggs are estimated to be worth up to £120 000 (US\$215 000).

Gauder were gaol for 30 months and Wittman 15 months. It is the first time a gaol sentence has been imposed in the UK for such an offence.

At the same hearing, another West German, Rolf Sperr, was sentenced to 18 months' imprisonment for attempting to import four rare Gyrfalcons *Falco rusticolus* into Britain, also through Dover.

Gauder and Wittman were arrested following a tip-off from an informant who alleged that Gauder had been coming to Britain for more than five years to steal eggs, with detailed maps supplied by another German, Horst Kilian, who was arrested in Iceland in 1986 for stealing wild birds.

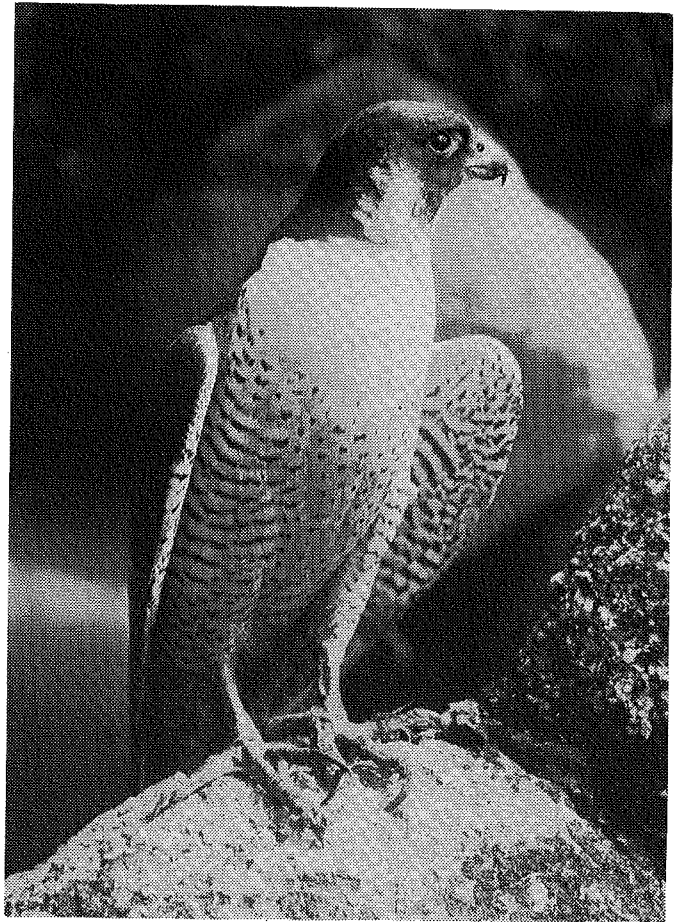
*Source: Observer Sunday (UK), 12 August 1990*

## Malta Exports Palm Cockatoos

Before its accession to CITES, Malta was believed to have been an important trade route for the movement of protected psittacines into the EEC, often via Singapore. Applications for entry into the Community were made on the dubious grounds that the birds had been bred in captivity in Malta. This route was identified in early 1988 and EEC Member States were recommended not to accept further imports of 'captive-bred' birds from Malta. At the time of Malta's accession to CITES on 16 July 1989, a number of psittacines were known to remain in the country awaiting export.

On 7 June 1990 information became available to TRAFFIC International suggesting that Malta had licenced the re-export of four Palm Cockatoos *Probosciger aterrimus* (CITES Appendix I) to Oman which were to travel on 8 June via the UK. While in transit in the UK, it became clear that the re-export document issued by Malta showed an invalid country of origin for the species. Despite this, the shipment was allowed to continue to Oman.

Transshipment through EEC Member States requires no import permit, but a valid export or re-export document must be available for inspection in order to comply with the UK controls.



Peregrine Falcon *Falco peregrinus*

©Eric Hosking/WWF

The document issued by Malta for the shipment in question is believed to have stated that the specimens were pre-Convention birds, bought in 1986, origin Singapore. CITES Parties have agreed rules for the granting of pre-Convention certificates in Resolution Conf. 5.11. Under the terms of this Resolution a re-exporting country can only issue a pre-Convention certificate for a live specimen when it is satisfied that at the date on which the species was taken from the wild, one of the following conditions was met: the species was not listed in the CITES Appendices; the country of origin was not a Party; or, the specimen was subject to a reservation. None of these conditions apply in this case. Palm Cockatoos were first listed in the CITES Appendices in 1975; the country of origin could not be Singapore (as the species does not occur there); the valid countries of origin - Australia, Indonesia and Papua New Guinea - have been CITES Parties since 1976, 1979 and 1976 respectively; and, the species was not subject to a reservation.

Steven Broad

## Uganda Markets Fish Leather

Uganda is producing leather from the skin of the Nile Perch *Lates niloticus*, a fish which grows up to 220lb in weight, and hopes it will compete with crocodile skins in the export market.

*Source: The Independent (UK), 5 August 1990*

## Trade and Captive-Breeding of Asian Bonytongues in Indonesia

Richard Luxmoore

During the course of a study of the python skin trade in Indonesia in December 1989, an opportunity was taken to visit Pontianak to investigate the breeding of Asian Bonytongues *Scleropages formosus*. Discussions were subsequently held with Dr George Tay, formerly head of the Freshwater Fisheries Laboratory in Singapore, about his pioneering work in breeding the species.

West Kalimantan has for long been the centre of the trade in Asian Bonytongue *Scleropages formosus* in Indonesia because it is the home of the most highly prized red colour variety. The fish have traditionally been caught in the upper reaches of the Kapuas River and exported to aquarists in many parts of the world. They are particularly favoured amongst the Chinese communities because they are considered to bring good luck. *S. formosus* has been listed in CITES Appendix I since 1975 and most exports have been illegal since Indonesia acceded to the Convention in 1978.

### Captive breeding

In the early 1980s (c. 1983-86), four companies in West Kalimantan were registered with PHPA (Department of Forest Protection and Nature Conservation) to breed *S. formosus* in captivity. However, inspection by the local PHPA office in Pontianak proved that these companies were not breeding the fish, but were merely serving as a front to market fish captured from the wild. Consequently, their registration was withdrawn.

A fifth company, P.D. Bintang Kal-Bar, has had more success in breeding, but was not registered until 1987. It is run by two brothers, Mr Halim and Mr Achyan (also known as The Henrie) and currently holds stock of *S. formosus* at six sites in West Kalimantan. Two of these sites were visited. The first attempts at breeding were made in 1980 and are said to have yielded success in 1984. Additional ponds were established on the outskirts of Pontianak from 1983 onwards, the largest of which was constructed in 1986.

Giesen (1986) visited the four registered traders in Pontianak in 1986 and concluded that none was breeding *S. formosus* at that time; however, he was not apparently aware of the existence of P.D. Bintang Kal-Bar. C. Huxley (pers. comm., 1989) visited P.D. Bintang Kal-Bar in February 1988 and reported that successful breeding was occurring.

### Husbandry

Many attempts have been made to breed *S. formosus* in captivity, but very few have been successful as it does not breed readily. The first authenticated record was at the Singapore Freshwater Fisheries Laboratory in 1981, and several more broods were obtained in subsequent years (G. Tay, pers. comm., 1989). Another private individual has been breeding *S. formosus* in Singapore since the early 1980s, and the procedure was described in detail by Dawes (1989). P.D. Bintang Kal-Bar is naturally secretive about its techniques because it fears commercial competition. Partially for this reason, and also because of the extremely high value of the fish, the ponds are all surrounded by elaborate security fencing and well guarded.

*S. formosus* will not breed in aquaria and needs to be kept at relatively low densities in semi-natural ponds. The water is kept extremely murky to mimic its natural environment.



West Kalimantan, showing the Kapuas River

At the oldest site (established in 1980) there is a large U-shaped pond, 400 m long and some 10 m wide. About 200 fish are said to be kept in one branch of this. At the newer site in Pontianak, there is a complex of ponds, the largest of which is 100 m x 38 m, with smaller ponds of around 35 m x 50 m, each of which was said to hold 150-250 *S. formosus*. The majority of the stock is of the red variety, but there are also some of the cheaper green and yellow varieties. They are kept in separate ponds to prevent genetic mixing. It is hoped to carry out some cross-breeding experiments in the future to investigate the genetics of the colour varieties. Although the subject is under investigation, it is currently not possible to sex the fish, and therefore the sex ratio of the stock is not known. A fisheries scientist has recently been employed by the company to carry out research.

*S. formosus* broods its young in the mouth. The eggs are very large, around 14 mm in diameter, and some 30-80 are produced in each brood. Scott and Fuller (1976) reported that only 20-30 eggs were produced in each brood, but Dawes (1989) recorded a brood of 93. The eggs are kept in the mouth for about six weeks until the yolk sack has been completely absorbed, and the fry are released at a size of around 6-8 cm. During incubation, the parent does not feed and is very placid. In captivity, the fry must be removed before they are released (i.e. before the yolk is completely absorbed) but if they are taken too early there is a risk of incurring higher mortality. In practice, at Bintang Kal-Bar the fry are harvested at monthly intervals. Under natural conditions, breeding only occurs in the wet season, mostly from October to January, but under the improved feeding regime on the farm, it is claimed that some broods are produced all year round. Huxley (pers. comm., 1989) also noted that some broods were produced outside the main breeding season, as did Dawes (1989).

Once they have been collected, the fry are removed to aquaria where their health can be monitored carefully. Mortality from egg to point of sale is said to be generally in the region of ten per cent.



## Stock and production

The original stock at Bintang Kal-Bar were obtained from fishermen who collected them from the wild. In general, fish were purchased which had been damaged in some way and were therefore cheaper. Initially, some 200 fish were bought and these have been added to over the years. The current stock is said to be in the region of 1200, of which around 30% are from the wild and the remainder reared on the farm. There was no way to confirm this figure because the water was far too murky to count the fish, but to judge from the total area of ponds in use, the stock could well be in this order of magnitude.

Production is said to be running at around 1000 hatchlings a month. Holding tanks containing 1000 fish less than 12 cm long and therefore probably less than two months old were seen. Bearing in mind that December is the peak breeding season in the wild, it is unlikely that this level of production would be maintained throughout the year.

## Trade

Although the breeding facility is registered with PHPA and may therefore trade within Indonesia, it has not, until now, been allowed to export fish. They are therefore normally sold in Pontianak and it is the buyer's responsibility to export them if he wants to. The foreign buyers are predominantly from Japan and Taiwan. The fish are normally sold at a length of 8-10 cm because they transport better at this age. If bigger, the mortality is higher. At this size the best 'red' variety is worth around US\$1000 a fish.

There is also a continuing trade in fish collected from the wild carried out by some well-organised gangs in West Kalimantan. Mr Halim estimates that some 1000 wild Red Bonytongue were sold in 1989 and around 20 000-30 000 Yellow and Green Bonytongues. The local PHPA officials have confiscated some fish at the airport, but the trade is extremely difficult to control. There is also an illegal trade in the yellow and white varieties of the fish from southern Sumatra to Singapore (Santiapillai and Rauf, 1989).

If these figures are correct, the world trade in Red Bonytongues may be in the region of 6000-13 000 fish a year, of which up to 90% are bred in captivity. The trade in the green and yellow varieties is greater but very few are bred in captivity.

## Status in the wild

In Indonesia, the red variety of *S. formosus* (sometimes described as 'golden') is restricted to the upper reaches of the Kapuas drainage in West Kalimantan, upstream of Sintang (see map). In the middle reaches of the river, between Sintang and Sanggau, is found the yellow variety, while the coastal districts hold varieties variously described as green, white and black. Other provinces of Kalimantan and Sarawak have populations of the green and yellow varieties, but not the red.

The red variety is the most valuable, followed by the yellow and finally the green. The cheaper varieties are widespread and said to be still relatively common, but the red variety is thought to have declined very rapidly, principally as a result of intense collecting pressure. Mr Halim (pers. comm., 1989) estimated that there may be only ten per cent of the numbers that there were ten years ago and reported that collectors now find it extremely difficult to find fish.

There is clearly an urgent need for some preliminary survey work to establish baseline population data and to delineate the distribution of the different colour varieties. This could be augmented by breeding studies and genetic work, possibly in collaboration with P.D. Bintang Kal-Bar.

## Implications for CITES

The Indonesian population of *S. formosus* was transferred from CITES Appendix I to Appendix II in 1989 under the terms of Resolution Conf. 5.21 and subject to an annual quota of 1250. While it would theoretically be possible to use this quota to export wild-caught fish, this would be undesirable as it would inevitably lead to further pressure on the already seriously depleted populations of Red Bonytongues. It would be far preferable to use the quota to allow the export only of fish which had been bred in captivity. The quota is probably not sufficient to allow the export of all the farm production. If some of the quota were allocated to a wild harvest, as was agreed at the seventh meeting of the Conference of the Parties, this would further reduce the amount available to export and would not provide an incentive to the farm(s) for further efforts in breeding. Apart from the insufficient size of the quota, another drawback is that the preamble of Resolution Conf. 5.21 makes it clear that it is to be viewed as an interim measure until alternative long-term solutions are found.

One possibility might be to treat the Indonesian population of *S. formosus* as Appendix I and to export captive-bred offspring as defined by Resolution Conf. 2.12. The products of the farm could be verified as first-generation captive-bred, but it is doubtful whether any second-generation breeding could be demonstrated. Breeding has been achieved for five years, but as the females probably do not mature until four years, there is only just time for a second generation to have been produced. Although likely, because of the numbers involved, this could not be confirmed as the fish have not been marked in any way. The only other farm known to be successfully breeding *S. formosus* in captivity (in Singapore) similarly does not have records sufficient to demonstrate second-generation breeding (Dawes, 1989).

An alternative would be to view the farm as a "ranching operation" as defined by Resolution Conf. 3.15. Under these terms, the stock removed from the wild would be the adult fish and the products exported would be their offspring. As no further stock need be removed from the wild, it cannot be considered to be detrimental and it is potentially beneficial in several ways: provision of young fish for restocking, swamping of the wild trade, etc. However, this definition of a ranching operation was rejected by the fifth meeting of the Conference of the Parties when the UK proposed to apply it to the Cayman Turtle Farm in the Cayman Islands.

## Verification of captive breeding

There are several reasons for believing that P.D. Bintang Kal-Bar is successfully breeding *S. formosus* in captivity:

1. The inspection was carried out at 36 hours' notice.
2. There is a substantial stock of healthy *S. formosus* maintained at low densities in ponds which appear suitable for breeding.
3. Two broods of young fish were collected from the buccal cavities of their parents during the inspection. The only way to have faked this would have been to have collected breeding parents from the wild and brought them to the farm. This can almost certainly be discounted a) because the parents were placid and apparently undamaged, and b) because it is most unlikely that broods would survive the stress of capture and transport to the farm.
4. The farm had excellent facilities for rearing young *S. formosus* and had stocks of around 1000 fish less than two months old. (N.B. it is not possible to say with certainty that these had not been collected from the wild, but the fact that they were all healthy and of a similar size was consistent with the claim that they had been bred in captivity).

If export of captive-bred specimens is to be allowed on a regular basis, it will be necessary to find some system of verifying the origin of the fish. The simplest way to do this would be to allow inspection of the stock and counting the fry at the time they are removed from the parents. This would require a monthly inspection as the fry are removed approximately every four weeks. It is not possible to mark the fry because this would reduce their value, but the inspection system would give a maximum estimate of the number of fish bred. One relatively easy measure which would reduce the possibility of wild-caught fish being exported would be to set a maximum size limit of 15 cm. All the fish sold by the farm are below this size and larger fish are certain to have been taken from the wild. It would not eliminate all trade in wild specimens as the collectors also catch small fish, either by taking them from the buccal cavities of their parents or by netting them while they are still shoaling close to the parent (Scott and Fuller, 1976). Matsumura and Milliken (1984) found that approximately half of the *S. formosus* sold in Japan were below 15 cm.

All CITES export permits in Indonesia must be signed by the Director General of PHPA and are therefore issued by the central office in Bogor. However, live fish would mostly be exported directly from Pontianak without passing through Jakarta. There are daily direct flights to Singapore. Inspection of such export consignments would be carried out by staff of the local PHPA sub-regional office in Pontianak.

#### Recommendations

1. Export of *S. formosus* from Indonesia should be restricted to specimens bred in captivity. A maximum size limit of 15 cm should be set.
2. A monitoring system should be established by PHPA to verify the number of fish bred in captivity. This would involve inspection of farms at the time of harvesting to count the number of fry produced. The farms should maintain records of the number of broodstock and rearing stock held, with details of births, deaths and sales. These records should be open for inspection by PHPA.
3. If the monitoring system proves that production of captive-bred *S. formosus* exceeds the current quota of 1250, a proposal could be developed to increase the quota provided that no wild fish are included.
4. All exports of live fish must be accompanied by CITES export permits which should specify the maximum size limit and the colour variety. At the point of export, the local PHPA officials should verify the numbers of fish exported and forward this information promptly to Bogor to allow monitoring of the quota.
5. A system of prior notification of export permits similar to that currently operating for crocodile skins, should be investigated. This might be facilitated if an exchange visit were organised for PHPA staff to discuss procedures with the importing authorities.
6. Procedures for prohibiting the illegal export of fish from West Kalimantan must be considerably strengthened. Co-operation must be encouraged with police and Customs authorities to ensure that offenders are punished and their stock confiscated and returned to the wild.
7. Surveys of wild populations of *S. formosus* are urgently needed to elucidate the distribution of the colour varieties and establish baseline population estimates. If this is not done, it will subsequently be difficult to justify retention of the population in Appendix II.

#### Acknowledgements

I should like to thank the staff of PHPA for organising my visit to Pontianak, in particular, Ir Herman Prayitno, Head of the sub-Balai KSDA in Pontianak, Ir Herman Syafii, who accompanied me from Bogor and helped with the interpretation and Dr Effendy Sumardja for helpful discussions. I am also very grateful to Mr Halim and Mr Achyan from P.D. Bintang Kal-Bar who gave me access to their fish breeding operation and supplied much information on the fish trade in West Kalimantan. In Singapore, Dr George Tay was very helpful in providing a description of his early experiments with breeding *S. formosus*.

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#### Asian Bonytongue Seizures

The following seizures of Asian Bonytongues were made in Los Angeles, USA, from late 1989 to March 1990:

1 from Thailand (25.5 cm); 4 from Taiwan (10 cm); 30 from Hong Kong (12.5 cm); 53 from Singapore (86.5 cm); 11 from Hong Kong (12.5 cm).

All specimens were of the green or silver colour forms. The Los Angeles market indicates a value of US\$600-US\$800 for 7.5 cm-12.5 cm non-red colour forms.

Source: *US Fish & Wildlife Service*

#### Amazonian Exporters Conserve Fish Stocks

The restriction on exports of Amazonian fish during the months of May, June and July, has been extended to cover all such exports during this period. This decision follows the creation of ACEPOAM (Associacao dos Criadores e Exportadores de Peixes Ornamentais do Amazonas) whose 14 members, themselves exporters based in and around Manaus, Brazil, see the total ban on collecting as a major conservation measure initiated by industry. The months of the ban coincide with the high-water period in the collecting areas, as well as with the breeding season of many of the species concerned.

Selected rivers have also been 'closed' for the purposes of collecting, for a period of at least two years.

Additionally, ACEPOAM proposes the registration of ornamental fish collectors, and a ban on new companies being set up, both in Manaus and elsewhere in the Amazon.

Source: *PETS Europe*, Vol. 2 No. 3, July 1990



## Publications Available

International Trade in Endangered Species - A guide to CITES by David S. Favre, Professor of Law, Detroit College of Law, USA.

1989. 424 pp. Price: £75 (US\$129). Published by Kluwer Academic Publishers.

The Evolution of CITES - A Reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora by Willem Wijnstekers.

1990 revised edition. 284 pp. Price: SF30 (US\$24) incl. postage. Published by the CITES Secretariat.

Both of these publications give detailed explanation of the operation of CITES. The approaches followed in each are in many ways very similar so they have been reviewed together. They begin by systematically reviewing the text and interpretations of each of the Articles of the Convention.

Favre devotes a chapter to the text of each Article followed by a general discussion of its meaning, a historical note on its development and a series of notes dealing with matters which arise from its interpretation. Many of the more complicated explanations are helped by the use of illustrative examples. Frequent, indexed references are made to relevant Resolutions passed by the Parties (up to and including those agreed at the sixth meeting of the Conference of the Parties) and seven selected Resolutions are included in full in an appendix. Other appendices include the full text of the Convention, a list of species in CITES Appendices I, II and III as of 1987, a list of CITES Parties as of November 1988, and copies of some of the standard forms adopted by the Parties.

Wijnstekers presents the text of the Convention in a more systematic manner, interspersed by cross-referenced notes dealing with each subject. Other chapters cover ranching and quota systems, trade in plants, and various administrative matters relating to the operation of the Convention. Eight annexes are included covering a variety of topics, most importantly an annotated list of CITES Resolutions (including those from the seventh meeting of the Conference of the Parties).

Both authors have made valiant attempts to clarify often complicated aspects of the CITES text and Resolutions. The levels of detail presented may be a little intimidating to a complete novice to CITES-related matters. Favre suggests that the first four chapters of his book should be covered as a minimum by such readers, but they may be well advised to start with a more popular description of the Convention. Wijnstekers suggests that his volume be treated as an encyclopaedia and such use is certainly encouraged by the clear and detailed index which has been compiled.

Each of the books has its particular strengths, Favre's providing interesting historical context and discussion of national interpretations and Wijnstekers' presentation of extremely clear and accessible reference material. Perhaps the greatest contrast is between the price asked for each volume.

Steven Broad

Checklist of CITES Fauna and Flora - a checklist of the animal and plant species covered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora by Kees Schouten.

1990. 165 pp. Price: SF20 (US\$15) incl. postage.

Published by the CITES Secretariat.

This book is in effect the separately published annex to Wijnstekers' The Evolution of CITES. Its aim is to be a quick reference guide to enable users (in particular Customs officers, port inspectors and Management Authorities) to find very easily the CITES Appendix in which a given species is currently listed, working from scientific or English common names. This is an excellent idea; the sources previously available which were used to obtain such information were diverse and quite difficult to use. The need for a compact, comprehensive, reliable and understandable book providing such information has often been expressed by those charged with the administration and enforcement of the Convention.

Disappointingly, Dr Schouten's book does not really achieve the admirable objective it sets itself. Although a number of synonyms have been included, the greatest need is normally for translation of trade names into scientific names. A quick check for trade names given to reptile skins or live parrots, for example, shows many important omissions; for example, "Whipsnakes", "Pennant's Parrakeet", or "Splendid Grass Parakeet".

The second main problem with the publication is the alarming number of mistakes and typographical errors that can be found. Some species are missing from the lists and a number of nomenclatural inconsistencies cause confusion. The listing of Colobus species is a good example of the latter. It is absolutely essential for a publication of this type to be completely accurate and this volume certainly is not; this is in complete contrast to Wijnstekers' companion volume, which has been very carefully compiled.

Overall this is a publication that could supply a great demand. The present edition certainly establishes a clear format for the presentation of this complicated information and it goes some way towards achieving a difficult goal. However, it will need to be improved significantly in future editions if it is to be treated as a reliable reference.

Steven Broad

## And Now For Something Completely Different . . .

### TRAFFIC Cartoon

TRAFFIC Italy has been involved in scripting a sketch in a popular childrens' magazine, TOPOLINO, on the theme of Mickey Mouse and his efforts to combat illegal wildlife trade.

Our hero, alias Topolino, TRAFFIC Super Agent, sets off from Mouseland and teams up with the wily Willie Wu Fong. Propelled by a wobbly-looking WWF rescue plane, the intrepid pair head off into the dense jungles of Yun-Lun where, aided by talking plant monsters, Topolino and his friends grapple with rapacious wildlife robbers and their evil accomplices.

To discover the fate of the fearless duo, their friends and foes, write to: The Walt Disney Company Italia S.p.A., Via Hoepli 3 - 20121 Milan, Italy, for details of availability of this spellbinding tale of adventure (Publication No. 1792).

## Introduction of Nile Crocodiles to South America

Richard Luxmoore

The farming of crocodilians has generally been regarded as beneficial to conservation, particularly where the industry relies on maintaining healthy wild populations. Until recently, commercial crocodilian farms were almost exclusively set up to use the locally occurring species where they were available; however, in 1989, a precedent was set when 110 Nile Crocodiles *Crocodylus niloticus* were imported to Brazil for the purpose of establishing a farm in Rio Grande do Sul. The import raised considerable concern amongst the international community because of the possibility of the crocodiles escaping and establishing feral breeding populations which could potentially spread throughout most of the South American continent.

The crocodiles in question were exported from Zimbabwe with valid CITES export permits, but their import into Brazil was subject to approval by IBAMA (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis). IBAMA reviewed the proposed import, without consulting its two crocodilian biologists and, on receipt of a favourable report, approved the import. The crocodiles were imported in late July 1989 and were held on a farm at Porto Alegre. The venture, Contaregis, is financed by a French banking concern, the Banco Frances Brasileiro. In response to international concern, IBAMA issued a statement to the effect that they were satisfied that the import did not pose a threat to local ecosystems, and that they had decided against using the Black Caiman *Melanosuchus niger*, a species which occurs elsewhere in Brazil, on the grounds that Rio Grande do Sul was outside its natural range.

At this stage, IBAMA declined further responsibility for control of the animals, which passed instead to the state authorities, the Department of the Environment for Rio Grande do Sul, who demanded an Environmental Impact Assessment to be prepared by the importers, giving them a total of eight months in which to comply. If approval was not granted, the importers were faced with the prospect of either destroying the expensively acquired animals or re-exporting them to whichever country that would accept them. Discussions were said to have been initiated with commercial interests in neighbouring South American countries, in particular, Paraguay, to see if they would accept the import of Nile Crocodiles. These discussions generated such concern amongst conservation and Government circles in Paraguay that the Management Authority rapidly passed a decree prohibiting the import of Nile Crocodiles for whatever purpose (see below). The Management Authorities of Peru and Colombia have also expressed their strong opposition to the introduction of exotic crocodilians for commercial purposes. A petition protesting against the import was signed by Latin American participants at the 10th working meeting of the IUCN/SSC Crocodile Specialist Group in April 1990.

The whole issue raises far-reaching concerns about other potential translocations of crocodilians for farming purposes. There are already feral populations of Spectacled Caiman *Caiman crocodilus* in Florida, Cuba and Puerto Rico, which have so far resisted all attempts at eradication. Crocodilians are kept in zoos in many countries, but there are very few examples of exotic species being used for commercial farming. There are a few American Alligators *Alligator mississippiensis* and Nile Crocodiles in Israel, where there are no native crocodilians, but the only known commercially farmed population in countries with native crocodilians is of Spectacled Caiman in Thailand. IUCN has prepared a position statement on the translocation of living organisms, in which it declares that alien species should not be introduced if there is a suitable native species present. Where there is none, it recommends

very stringent criteria to be met and careful studies to be carried out in advance. In particular, it recommends that carnivorous species should not be introduced if their prey includes rare native species that could be adversely affected. It also contains a special caution that aquatic species have a great potential for rapid invasive spread, concluding that no introduction should be made for which a control does not exist or is not possible.

While the original importers of exotic crocodilians can be expected to take great care that their expensive animals will not escape, once a large farmed population has become established, animals are likely to be sold to a number of other farms which have lesser controls. Furthermore, farms may run into financial difficulties and animals may escape or be released. Over a period of time, it is inevitable that some animals will escape and, where the habitat is suitable, establish feral populations. Where native crocodilians exist, it is possible that hybridisation may occur, potentially threatening the rarer species. Crocodile farming is experiencing a great expansion worldwide and production is increasing rapidly. It is therefore likely that further introductions will take place unless strict pre-emptive measures are taken.

### Crocodilian Trade Restrictions:

#### PAPUA NEW GUINEA

From 28 May 1990 the Government of Papua New Guinea stopped issuing export permits for crocodile skins where the export is to a non-Party state or to a reserving party.

The ban is particularly directed at Singapore, which has become the major outlet for crocodile skin exports from Papua New Guinea. According to Papua New Guinea's Department Secretary, Barney Rongap "It is hoped that Papua New Guinea's action will encourage Singapore to fully implement CITES controls on crocodilians and thereby help to eliminate illegal world trade which still threatens to undermine the crocodile management programs of countries such as Papua New Guinea."

#### PARAGUAY

On 19 July 1990, the Republic of Paraguay issued a decree (No. 6418) which prohibits the introduction of the Nile Crocodile *Crocodylus niloticus* (see above). It further prohibits the introduction of any exotic species without permission from the Ministry, and authorises the eradication of any exotic crocodilians found in Paraguay.

#### THAILAND

In order to assist Thailand in CITES implementation, the CITES Secretariat has urged all Parties not to import/export/re-export crocodilian skins and leather from or to Thailand without prior consultation with the Secretariat.

This request arises from the finding that illegal caiman skins originating from Latin America are being laundered through Thailand, a country which still has no domestic regulation to cover CITES provisions and unable to control import and re-export of specimens of CITES species except of those which occur in Thailand. With reportedly large stockpiles of illegal caiman skins in Thailand, it is difficult to distinguish between legal and illegal crocodilian skins and leather re-exported from Thailand.

*Sources: Papua New Guinea Post-Courier, 7 June 1990;  
Decreto No. 6418, Rep. of Paraguay, 19 July 1990;  
CITES Secretariat Notification to the Parties, No. 593*

## TRAFFIC Network Activities

Owing to lack of space, we have been unable to include a report of the Network activities in this issue.

With effect from Vol. 12, this feature will appear once a year, rather than in each issue.

## CITES Symposium in the Netherlands

On 26 April 1990, TRAFFIC Netherlands organised a symposium on the implementation of CITES in the Netherlands (see *Traffic Bulletin*, 11(2/3):47). A report presented by Hans Brouwer, a part-time employee at TRAFFIC Netherlands, contained a number of recommendations regarding legislation, the permit system and CITES implementation. These included: that Dutch law should be adapted to fully implement EEC-CITES regulations; illegal trade in both plants and animals, including shipments in transit, should be consistently prosecuted; border controls and inspection within the Netherlands should be improved; and, a policy concerning the housing of seized animals should be developed.

The fact that Dutch law does not fully implement EEC-CITES regulations has received a lot of attention lately. One problem is that the Netherlands does not list all CITES Appendix I and EEC Annex C1 animal species in the Endangered Exotic Animal Species Act, a decree strictly regulating commercial activities, according to EC-CITES regulations. Consequently, some species, like Tucuman Amazons *Amazona tucumana* and Moluccan Cockatoos *Cacatua moluccensis*, can be freely traded within the country, while under the terms of EEC Regulation 3626/82, they should only be traded when exemptions have been granted by a Member State government. A new law to correct this, the Flora and Fauna Act, has still to be passed.

Proceedings of the meeting will be published in Dutch, in September.

*Source: TRAFFIC Netherlands*

## ANNOUNCEMENT

### Wildlife Economics and Management: Policy and Practice

The British Council will run a course, entitled "Wildlife economics and management: policy and practice", in Canterbury and Jersey, UK, from 2-21 April 1991.

Amongst a wide range of topics to be discussed, subjects will include: the social and economic value of wildlife to a country; cash cropping, tourism and hunting; the role and aims of captive breeding; re-stocking, re-introduction, introduction, farming, ranching and multi-species systems; wildlife and environmental law. The course is designed for experienced policy-makers and senior administrative staff concerned with the commercial and scientific management of wildlife.

Application forms can be obtained from:

Courses Department  
The British Council  
65 Davies Street  
London W1Y 2AA.

## TRAFFIC Europe

The TRAFFIC Network in Europe has been reorganised so that it operates on a regional level. On 1 September 1990, a TRAFFIC Europe office was established in Brussels, Belgium, under the direction of Tom De Meulenaer, formerly Director of TRAFFIC Belgium. This office will be responsible for the co-ordination of all activities of the former TRAFFIC offices in France, Germany, Italy and the Netherlands whose staff will now operate as national representatives of TRAFFIC Europe. Since early June 1990, the TRAFFIC office in Austria ceased operations.

The purpose of this new approach to TRAFFIC activities in Europe is to allow the implementation of a regional work programme, which will concentrate on subjects of common concern, initially including reptile skin trade, European plant trade and wildlife trade in Eastern Europe and Spain.

## Correction

The following Ethiopian export quotas for crocodylians, agreed at the seventh meeting of the Conference of the Parties to CITES, corrects those figures published in *Traffic Bulletin* 11:2/3.

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Nile Crocodile <i>Crocodylus niloticus</i>				
Ethiopia	0	9300 r*	8800 r*	8800 r*
	0	20 w	20 w	20 w
	0	50 t	50 t	50 t

r = ranches specimens; w = wild harvest; t = hunting trophies; \* = including 2500 live hatchlings.



## REMINDER

### Subscription Charges to Cease

With effect from Volume 12, the *Traffic Bulletin* will be available free of charge to all interested persons. This is made possible by the support of WWF.

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