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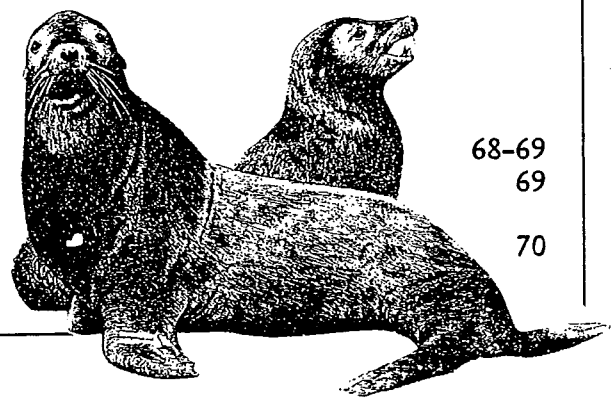

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Countries Party to CITES

The following is a complete list of CITES Party States as at 1 September 1984 with the dates on which they became party. Also listed are those countries which signed the Convention but have yet to ratify.

Country	Entry into force
Algeria	21.02.84
Argentina	08.04.81
Australia	27.10.76
Austria	27.04.82
Bahamas	18.09.79
Bangladesh	18.02.82
Belgium	01.01.84
Benin	28.05.84
Bolivia	04.10.79
Botswana	12.02.78
Brazil	04.11.75
Cameroon	03.09.81
Canada	09.07.75
Central African Republic	25.11.80
Chile	01.07.75
China, People's Republic of	08.04.81
Colombia	29.11.81
Congo	01.05.83
Costa Rica	28.09.75
Cyprus	01.07.75
Denmark	24.10.77
Ecuador	01.07.75
Egypt	04.04.78
Finland	08.08.76
France	09.08.78
Gambia	24.11.77
German Democratic Republic	07.01.76
Germany, Federal Republic of	20.06.76
Ghana	12.02.76
Guatemala	05.02.80
Guinea	20.12.81
Guyana	25.08.77
India	18.10.76
Indonesia	28.03.79
Iran	01.11.76
Israel	17.03.80
Italy	31.12.79
Japan	04.11.80
Jordan	14.03.79
Kenya	13.03.79
Liberia	09.06.81
Liechtenstein	28.02.80
Luxembourg	12.03.84
Madagascar	18.11.75
Malawi	06.05.82
Malaysia	18.01.78
Mauritius	27.07.75
Monaco	18.07.78
Morocco	14.01.76
Mozambique	23.06.81
Nepal	16.09.75
Netherlands	18.07.84
Nicaragua	04.11.77
Niger	07.12.75
Nigeria	01.07.75
Norway	25.10.76
Pakistan	19.07.76
Panama	15.11.78
Papua New Guinea	11.03.76
Paraguay	13.02.77
Peru	25.09.75
Philippines	16.11.81
Portugal	11.03.81
Rwanda	18.01.81
Saint Lucia	15.03.83
Senegal	03.11.77
Seychelles	09.05.77
South Africa	13.10.75
Sri Lanka	02.08.79
Sudan	24.01.83
Suriname	15.02.81
Sweden	01.07.75
Switzerland	01.07.75
Tanzania	27.02.80
Thailand	21.04.83
Togo	21.01.79
Trinidad & Tobago	18.04.84
Tunisia	01.07.75
Union of Soviet Socialist Republics	08.12.76
United Arab Emirates	01.07.75
United Kingdom	31.10.76
United States of America	01.07.75
Uruguay	01.07.75
Venezuela	22.01.78
Zaire	18.10.76
Zambia	22.02.81
Zimbabwe	17.08.81

Signatory States not yet Ratified

Ireland	01.11.74
Kampuchea	07.12.73
Kuwait	09.04.73
Lesotho	17.07.74
Poland	08.10.73
Viet Nam	03.03.73

Appeal to Halt Ivory Trade with Singapore

The CITES Secretariat, in their Notification to the Parties No. 303 of 23.7.84, has appealed to all Party States to take immediate action to prohibit and prevent any trade in ivory with or through Singapore.

Reliable information received by the Secretariat indicates that large quantities of illegal ivory have been shipped from Africa to Singapore in 1983 and 1984, including over forty tonnes from Burundi this year.

So far, the Singapore Government has failed to respond to the Secretariat's communications on this subject, but has confirmed that it does not control the import of ivory. Singapore is not a Party to CITES, moreover comparable documentation meeting the recommendations of CITES Resolution Conf. 3.8 is not issued by the competent authority for re-export of ivory.

Ivory Export Ban for Chad

The Chad Government has informed the CITES Secretariat that no ivory export permits will be issued from 13 August 1984, until further notice. It is not known whether this is likely to be a long-term ban.

The Japanese Trade in Bonytongue and CITES-Listed Fish

by Shinobu Matsumura and Tom Milliken

INTRODUCTION

Along with dogs, cats and small caged birds, goldfish and tropical fish are popular pets in Japan. In recent years, however, there has been an expansion in the pet trade to include more exotic and rare reptile, amphibian and fish species. Imports of ornamental fish, excluding goldfish and carp, have dropped when compared to the tropical fish boom of twelve years ago (Fig. 1), but the number of different species being imported has increased. To date, more than 2000 species of fish have been identified in trade in Japan (Azuma and Nakaomi, 1981). The demand for just colourful or attractive fish is changing; consumers now also favour species of unusual shape or which exhibit interesting behaviour. The number and proportion of wild-caught fish in pet shops is increasing.

There are not many species of fish included on the CITES Appendices, and there are particularly few tropical fish. Of the many species of ornamental fish regularly imported into Japan, only nine are subject to CITES controls (see Table 1). Of these, two species in particular, the Asian Arowana (Scleropages formosus) and Pirarucu (Arapaima gigas), have enjoyed popularity in Japan as ornamental fish. When CITES was accepted, the inclusion of these species on the Appendices caused much concern amongst dealers and collectors about the possible effects on the trade; however importation has continued.

This report analyses the Japanese trade in these two species and comments on why illegal importation continues despite the international controls of CITES and despite national export restrictions in many countries where these species occur. The results of a survey of tropical fish shops in the Tokyo metropolitan area and of a survey by questionnaire, of CITES-listed fish species held in Japanese zoos and aquaria are presented. Trade in other bonytongue and CITES-listed tropical fish species is also discussed.

TABLE 1

CITES-listed Tropical Fish Species Imported into Japan

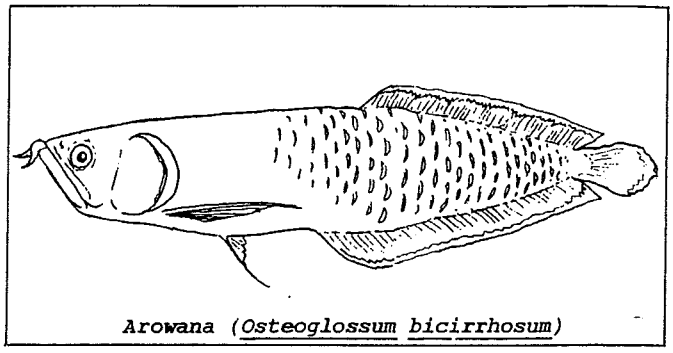
Asian Arowana	Scleropages formosus	Appendix I
Pirarucu	Arapaima gigas	Appendix II
African Blind Barb	Caecobarbus geertsi	"
Tropical Killifish	Cynolebias constanciae	"
"	Cynolebias marmoratus	"
"	Cynolebias minimus	"
"	Cynolebias opalescens	"
"	Cynolebias splendens	"
Australian Lungfish	Neoceratodus forsteri	"

Bonytongue Species

The family Osteoglossidae is considered to be one of the primitive groups of bony fishes, and seven species are known (see Table 2). All are large fish and inhabit tropical freshwaters. Precisely because of their primitive look, bonytongues are popular with keepers of ornamental fish. In Japan, all seven species have been identified in trade.

AROWANA

The common name Arowana usually refers to Osteoglossum bicirrhosum which is widely distributed throughout the Amazon River basin in South America. Growing to a length of up to 80cm, the Arowana is widely exploited as a local food source.

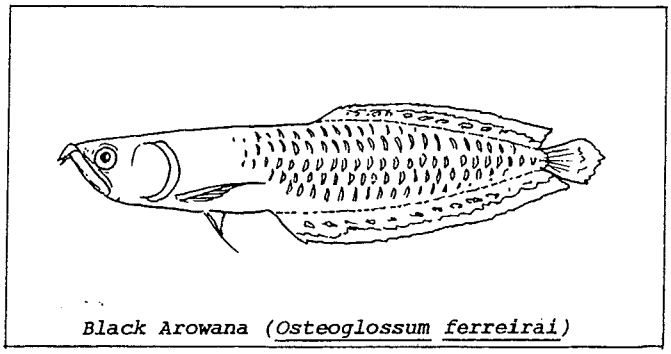


Arowana (Osteoglossum bicirrhosum)

Characteristically silver with pink edges on the scales and fins, there is reportedly some regional variation in colour. This species, the first bonytongue introduced to the Japanese aquarium trade, is imported in the greatest numbers, mostly as very young fish with yolk sacs still attached. Most importation occurs from December to March, with considerable mortality. Although this species is not listed on CITES, since 1974 Colombia has prohibited its "capture, transport or commercialization" (Hemley and Robertson, 1983). Most imports to Japan come from Brazil or Peru. This species is sometimes traded under the name "Silver Arowana".

BLACK AROWANA

The second largest volume of trade involves the Black Arowana (Osteoglossum ferreirai), a species which was only discovered in 1966. It was first imported into Japan the following year. With a smaller body, and colour changes as it matures, the Black Arowana is generally regarded by Japanese to be prettier than the Arowana. Although the Black Arowana is very popular, due to its limited distribution along the Branco River in Brazil and intensive exploitation which has considerably reduced the population, it is imported in fewer numbers than the Arowana. Generally imported when about 5cm in length with yolk sacs still attached, mortality during transport is reported to be even higher than that for the Arowana (Matsuzaka and Taki, 1983; Azuma, 1979, 1981). Like the Arowana, importation primarily occurs from December through March, the peak level being in February. However there is limited importation later in the year. This species is not listed on CITES, nor is it protected by Brazilian national law.



Black Arowana (Osteoglossum ferreirai)

ASIAN AROWANA

The third most popular bonytongue species in the Japanese trade is the Asian Arowana (Scleropages formosus) which has a patchy distribution from Burma, Laos, Vietnam, Kampuchea, Thailand, the Malay Peninsula, Sumatra, Bangka, and Borneo. This species was introduced to the Japanese aquarium trade in 1971 (Azuma, 1981) and has enjoyed wide popularity as an ornamental fish ever since. Within the species there is a great deal of colour variation, and a number of different types have been classified. In Japan the two recognized types, commonly known as the 'Red Arowana' and the 'Green Arowana', are clearly distinguished in trade, and until recently these types were considered by Japanese dealers to be separate species. The Red Arowana, which is rarer in the wild, is more expensive to buy.

The adults of each type are readily identifiable. The back of the Green Arowana is olive-brown, and the sides and gill covers are dull silver. The irises are brown, and each fin is light olive-brown. The Red Arowana has a dark reddish-brown back, the sides and scales along the back are green, and the gill covers are shiny gold. The irises are red, and each fin is light reddish-brown.

The colour differences in 10cm specimens of the two types are subtle, making it very difficult to distinguish them at that size. Although the scales of the Green Arowana sometimes have a black edging, normally the fish is pale olive-brown with no markings on the fins, and the colouring of the Red Arowana is virtually the same. Japanese traders look for a faint pale orange pattern on the edge of the scales of the Red Arowana as the standard means of distinguishing them. Most importation involves young fish, approximately 10cm long, and occurs between October and the following February.

The Asian Arowana has been listed on Appendix I of CITES since the entry into force of the Convention on 1 July 1975 and this listing prohibits most commercial trade in the species between party States. It is considered to be extirpated from Thailand (Bain and Humphrey, 1982), and has been protected from export by national law in Indonesia since August, 1980 (Anon, 1981b). The IUCN Red Data Book on Freshwater Fish (IUCN, 1977) listed the Asian Arowana as "Vulnerable".

PIRARUCU

Unlike the Asian Arowana, which enjoys a comparatively general appeal, the Pirarucu (Arapaima gigas) is primarily prized as an ornamental fish by specialist collectors. Although it has been imported for a long time, trade volumes have been limited because the fish grows to such a large size. The Pirarucu is the largest of the South American bonytongues attaining a length of over 2m. Inhabiting the Amazon and Orinoco river basins, it is highly valued as a food source throughout the region, but due to intensive exploitation, large Pirarucu have become extremely rare.

This species is popular as a public aquarium exhibit in Japan and it is often the star attraction at special summer exhibitions, using names like "Amazon Show" and "Strange Fish Show", held at large department stores throughout the country.

Pirarucu are usually imported when about 10cm long. Although similar in shape to the mature fish, the young have a blackish colouring and are not very distinctive.

A subsidiary trade exists in the hard scales of the Pirarucu which are made into accessories, and the dried tongue of this species is occasionally imported as a bizarre novelty item.

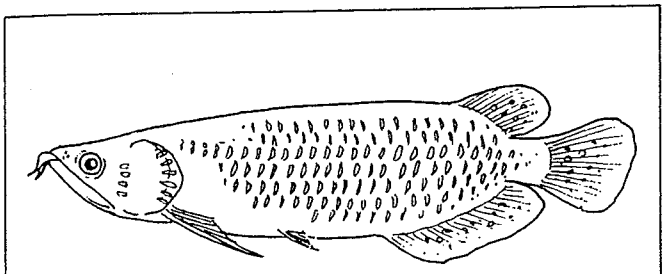
Peru, Brazil and Colombia have all taken measures to control exploitation and to protect the species. In Peru, for example, it is illegal to take specimens under 1.5m for local consumption, and in Brazil, Peru and Colombia the exportation of Pirarucu is prohibited (Matsuzaka, 1981b). The IUCN Red Data Book on Freshwater Fish listed the Pirarucu as "Vulnerable". It has been listed on CITES Appendix II since 1 July 1975.

NORTHERN BARRAMUNDI/SPOTTED BARRAMUNDI

Importation of the two species of bonytongue which inhabit the waters of New Guinea and Australia has only recently begun and is still in very limited quantities. In 1980, two Northern Barramundi (Scleropages jardini) were imported, and in the following year the Spotted Barramundi (S. leichardti) came in (Azuma, 1981). The Spotted Barramundi has been a protected species in Indonesia since August 1980 (Anon, 1981b).

TABLE 2
Bonytongue Fish Species

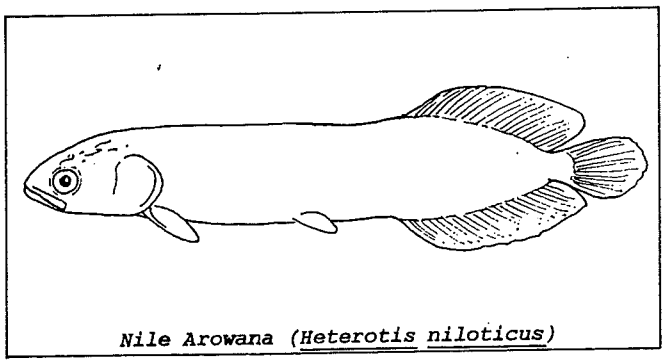
Common Name	Scientific Name	Distribution
Asian Arowana	Scleropages formosus	Burma, Indonesia (Bangka, Kalimantan, Sumatra), Kampuchea, Laos, Malaysia (Peninsular, Sabah, Sarawak), Thailand, Vietnam.
Pirarucu	Arapaima gigas	Amazon and Orinoco River Basins in Brazil, Colombia and Peru.
Nile Arowana	Heterotis niloticus	Upper reaches of the Nile, West and Central Africa.
Arowana	Osteoglossum bicirrhosum	Amazon River Basin, Guianas.
Black Arowana	Osteoglossum ferreirai	Rio Branco, a branch of the Rio Negro, Brazil.
Northern Barramundi	Scleropages jardini	Eastern Australia.
Spotted Barramundi	Scleropages leichardti	Northern Australia, Irian Jaya, Papua New Guinea.



Northern Barramundi (Scleropages jardini)

NILE AROWANA

The Nile Arowana (Heterotis niloticus) is the only African bonytongue species and has a wide distribution from the upper reaches of the Nile River across central Africa to the west coast. Although the Nile Arowana was first imported into Japan in 1979 (Azuma, 1981), the actual volume of trade in this species has been very small. At present, only a few serious collectors purchase this species.



Nile Arowana (Heterotis niloticus)

Market Survey of Ornamental Fish Shops

Methodology

From 3 December 1982 to 31 January 1983, TRAFFIC (Japan) carried out a survey of thirty-five ornamental fish shops in the Tokyo area. The objective of the survey was to assess the extent of trade in both CITES-listed bonytongue species by obtaining information on sales, prices, volumes, import methods and trade routes. The survey was specifically designed to take place during the most active period for importation of the Appendix I Asian Arowana. The survey also coincided with active import periods for the Pirarucu, Arowana, and the Black Arowana.

There are currently at least a hundred large or medium-sized ornamental fish shops in the Tokyo metropolitan area alone, and when smaller shops are included, the total number becomes considerable. Only ornamental fish shops which advertise in specialist magazines or which are well known were visited for this survey. Generally speaking, most small or medium-sized fish shops only obtain Asian Arowana by special order as it is a very expensive tropical fish to keep in stock.

Results

Of the thirty-five shops included in the survey, the Asian Arowana was for sale in twenty-six establishments or 74% of the total. 198 specimens were actually seen in these shops, and dealers indicated that an additional twenty-nine specimens were being held in stock at other locations. Smaller specimens of 8-10cm accounted for over half of the total, and the Red Arowana was far more frequently displayed than the less expensive Green Arowana (see Table 3). Prices for Green Arowana ranged from Y30 000 (US$130 at c. Y235:$) for a 10cm specimen to Y100 000 (US$425) for 20cm fish. Red Arowana cost Y50 000 (US$215) for 10cm fish, and up to Y250 000 (US$1065) for 20cm fish. One 40cm individual was priced at Y600 000 (US$2555) (see Table 4). The total retail value of the Asian Arowana identified in this survey is estimated to be over Y24 million (over US$102 000).

Only nine Pirarucu, six of which were over 30cm in size, were found distributed among four shops, indicating the rarity of this species in trade. On the other hand, Pirarucu were more expensive than any other bonytongue species including the Asian Arowana. Prices for 10cm specimens ranged from Y120 000 to Y180 000 (US$510-765), a 50cm individual was priced at Y600 000 (US$2555) and a 1m long Pirarucu was offered for Y1 million (US$4255), making it the single most expensive fish identified in this survey. These nine Pirarucu had an estimated retail value of almost Y5 million (over US$21 200).

The popularity of the Arowana in trade was attested to by the fact that every shop surveyed had at least five to ten specimens on exhibit, and larger establishments invariably had twenty to thirty fish displayed. At one shop 600-800 5cm long Arowana were seen crowded in an aquarium, including a considerable number of dead fish. About 1000 Arowana were seen during the survey. Fish 6cm in size sold for about Y3000 (US$13) while a 20cm specimen was priced at Y15 000 (US$65).

The second most abundant non-CITES bonytongue was the Black Arowana. This species was also identified in every shop, where usually at least three fish were found. Altogether, over 100 Black Arowana were seen, but it should be noted that the peak import period for this species is during the month of February, which was after this survey was conducted. Prices ranged from Y5000 (US$21) for a 6cm specimen to Y20 000 (US$85) for fish 20cm in size.

Out of twelve shops which exhibited the Barramundis, only one featured both species. A total of six Northern Barramundi and seven Spotted Barramundi were found, at prices ranging from Y150 000 to Y300 000 (US$640-1280).

The Nile Arowana was the bonytongue species least frequently observed in shops. Only three shops, with a single large fish each, featured this species and the prices were not available. (After this survey was completed several 10cm Nile Arowana were seen for sale at a tropical fish shop in August, 1983. They were priced at Y50 000 (US$215) each.)

Dealers' Comments

Many dealers mentioned that because CITES now prohibits the importation of Asian Arowana into Japan, the price for the fish has risen. Although the majority of buyers are avid collectors, consumers now include many young people in their twenties, despite the high price of the fish. One dealer mentioned that some fish which are brought in with import certificates are particularly expensive, and felt they would definitely acquire value in the future. At this particular shop there was a sign next to the fish which claimed "Import Documents Available for Each Fish".

Concerning the level of importation, one dealer reported that in November, 1982 he imported 120 8-10cm Green Arowana to Japan, and sold them to customers for Y30 000 (US$130) each. Although twenty died, the rest had all been sold by 1 December.

The same dealer bought 120 Red Arowana from a consignment of 300 imported by someone else in Osaka in autumn 1982. He brought them to Tokyo and by the first part of December, almost all had been sold. Sales are rapid when stocks are available because importation usually only occurs between the months of October and January, and therefore most collectors have had

to wait for some time. The same dealer admitted that, although there appears to have been some illegal importation recently, his shop had received permission from the Government to import, and he intended to continue importing during the season. He had also imported several Pirarucu into Japan and sold all of them for Y180 000 (US$765) each. Apparently, one customer purchased four fish.

The existence of freelance importers was confirmed by another dealer who admitted that recently there has been a lot of illegal importation, mostly of Green Arowana, by individuals who are not dealers themselves. At his shop he had questioned a number of people who came in to sell fish, but said he did not make any purchases. The dealer said that the five 25cm Red Arowana found in the shop were from the first shipment of Asian Arowana imported after acceptance of CITES, and that it had taken six months to obtain an import permit from the Japanese Government in 1982. At present, this shop only handles Red Arowana and import permits are obtained for all fish, according to the dealer.

Zoo and Aquarium Survey

Methodology

From the list provided by the Japanese Association of Zoological Gardens and Aquariums, twenty-six zoos and forty-seven aquaria were sent questionnaires in March 1983. These seventy-three establishments were asked to provide information concerning the number of fish, reptiles and amphibians listed on the CITES Appendices, in their possession, the year in which they were purchased or acquired, and other relevant details.

Results

A total of fifty-one replies were received from nineteen zoos, twenty-eight aquaria, and four unidentified establishments. Of these, no zoos and only sixteen aquaria said they were in possession of CITES-listed fish: ninety-three Asian Arowana, sixty-seven Pirarucu and eleven Australian Lungfish (see Table 5).

Of the ninety-three Asian Arowana, seventy-four were fish which had been seized by Japanese Customs in 1982 (see Customs Seizures), and two others had been donated by their previous owners. Three of the Pirarucu had also been received from Customs. The remaining seventeen Asian Arowana and sixty-five Pirarucu had all been purchased from dealers. All of the Australian Lungfish had been obtained through exchanges between aquaria. There were no reported births at any of the aquaria which responded to the questionnaire and there are not believed to be any recorded captive births for these species in Japan.

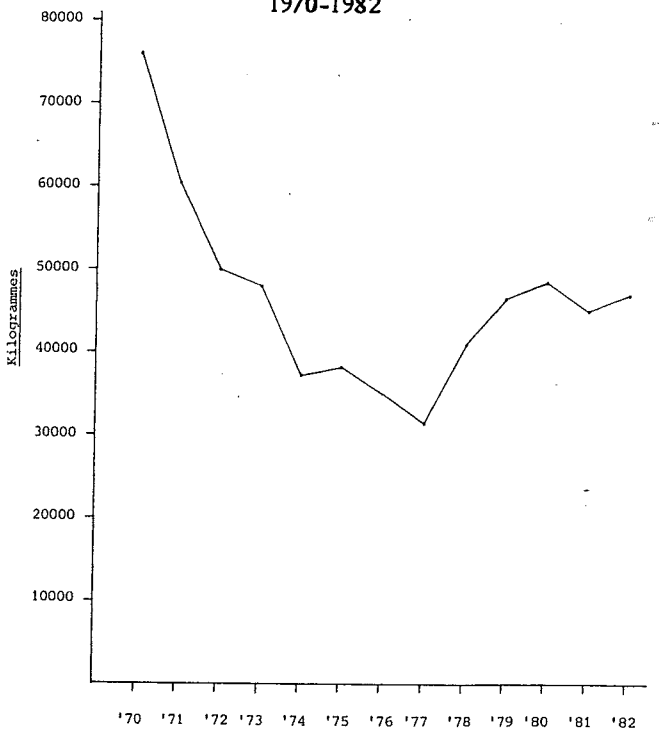
It should be pointed out that Japanese zoos and aquaria seldom engage in direct importation, but rather acquire animals by purchasing from importers. Consequently, dealers often import animals specifically for the purpose of selling to zoos or aquaria. It is interesting to note that approximately half of the Pirarucu which are in Japanese aquaria were purchased after Japan's acceptance of CITES. Some of the fish were still small in size, indicating that they were probably imported after CITES controls became effective.

DISCUSSION

Commercial Trade in Asian Arowana

In 1981, the year following CITES acceptance, there was reportedly no importation of Asian Arowana into

Fig. 1
Imports of Aquarium or Ornamental Fish into Japan 1970-1982



Japan. According to dealers questioned, importation resumed in the early summer of 1982, and most of the fish came into Japan as 'captive-bred' specimens from Singapore with import certificates issued by the Japanese Government. The majority of the fish for which traders are reportedly obtaining 'captive-bred' certificates are young Red Arowana. Since the procedure for importation is the same for either type, it is more profitable to import the Red Arowana which commands higher prices.

Government officials at the Japanese CITES Management Authority did corroborate part of the information obtained from the dealers by admitting that import permits had been issued in 1982 for a total of six shipments of Asian Arowana. However, according to the CITES annual report, the trade originated from Hong Kong, Taiwan, and Indonesia. The numbers imported were 20, 182 and 2000 respectively and all were listed as 'captive-bred'.

It is very doubtful that these fish were in fact 'captive-bred', and thus eligible for a CITES exemption. Despite attempts which began as early as 1927, Asian Arowana are only known to have been successfully bred in captivity once, in November 1981 at the Sembawang Freshwater Fisheries Laboratory in Singapore under an experimental programme sponsored by the Primary Production Department of the Government (Anon, 1982a). We have obtained no record of breeding since then. Moreover, the fish which were bred were Green Arowana. Another experimental programme conducted by the Thai Inland Fisheries Division also succeeded in rearing four fish from wild-collected eggs and these individuals are housed at the National Inland Fisheries Institute at Kasetsart University, Bangkok (Bain and Humphrey, 1982).

At present, there is no known commercial production of Asian Arowana. If traders were effectively breeding this species, their successes would be publicised and the fish would be openly sold throughout the world. However, without evidence of successful captive-breeding one can only conclude that all Asian Arowana in the Japanese trade are actually wild-caught, and deceptively imported as 'captive-bred' in order to circumvent trade controls. Indonesia and Malaysia are considered to be the sources for these fish.

Although Singapore is not a Party to CITES, the Government has acknowledged and recently taken steps

to control the illegal trade in Asian Arowana. The Primary Production Department advised fish dealers in early 1983 against buying, selling, or displaying Asian Arowana, and announced that it will not issue permits for the import, export, transhipment, or other commercial transactions of the species (Anon, 1983). Possibly as a result, recent articles in Aqualife magazine indicate that Asian Arowana are now coming into Japan from Bangkok, Thailand.

Other illegal importation of Asian Arowana into Japan occurs without the benefit of 'captive-bred' papers or other export/import documents. Both private individuals and dealers have been known to bring this species into Japan concealed in carry-on baggage in order to avoid customs checks altogether. Several seizures have recently occurred which verify this modus operandi (See Customs Seizures).

The 198 fish actually seen at the retailers, can be regarded as indicative of a considerable trade, considering the high turnover for this species mentioned by dealers and the fact that only a third of the medium or larger size fish shops were surveyed in the Tokyo area. Comparatively, similar species of large wild-collected fish, which are also relatively popular in Japan, such as Tiger Catfish (Pseudoplatysforma fasciatum), Clown Tetra (Distichodus sexfasciatus) and Spotted Garfish (Lepisosteus oculatus), were all found in smaller quantities or not seen at all in the shops surveyed.

Obviously, the numbers of Asian Arowana which were actually handled by retailers are not limited to those recorded in the findings of this survey. Throughout 1981 and 1982 tropical fish magazines, particularly Aqualife and Fish Magazine, regularly featured advertisements offering Asian Arowana for commercial sale, which was not the case before CITES acceptance. Osaka, Nagoya, and Kobe, major Japanese cities also known to have considerable trade in the Asian Arowana, were not surveyed at all. In addition, other fish are illegally imported and sold by individuals without ever passing through a tropical fish shop. Based upon information received from dealers, Government officials, informed sources and the numbers of fish obtained through confiscations (See Customs Seizures), it is likely that over 3000 Asian Arowana were imported between early autumn 1982 and early spring 1983.

Commercial Trade in Pirarucu

The Pirarucu is on Appendix II of CITES and commercial trade is, therefore, permitted with a proper export permit from the country of export. Before 1979, most Pirarucu in the Japanese trade originated in Brazil and Colombia, and were shipped first to Miami, and then, through Los Angeles to Japan. The volume of trade was small.

In 1979, however, the Sanwa Kogyo Co., a Japanese importing company, began organized collection and direct shipment to Japan from bases which they set up in South America. As a result, both trade routes and source countries changed for the Pirarucu. Peru became the primary supplier of the fish, which were shipped from Iquitos through Mexico City to Japan. According to information published in 1982 by the Sanwa Kogyo Co., in 1979, the year preceding Japan's acceptance of CITES, they imported 1000 Pirarucu during September alone (Anon, 1982b). This claim is disputed by knowledgeable observers who believe the real figure to be less than half of that. Small quantities of Pirarucu originating in Brazil, where the species is protected, were reportedly exported from Paraguay in 1981.

The Sanwa Kogyo Co., whose collection methods have been described as particularly wanton, went into insolvency in 1982 and was forced to abandon its South American operations completely. As a consequence, direct importation from most of South America virtually ceased. Importation of ornamental fish direct from Paraguay ceased altogether, and the Colombian trade in tropical fish, which in 1979 totalled 1217kg, dropped substantially, to less than 200kg (see Fig. 2). However in Peru, another importing company, Sekai Suizokukan (World Aquariums), set up business and began exporting Pirarucu and other South American fish to Japan.

Pirarucu most frequently come to Japan in groups of ten young mixed with other species. An advertisement in October 1981 Aqualife claimed to have forty Pirarucu for sale. The Pirarucu in question were nearly all young fish and they probably came through Taiwan. There was, moreover, evidence of Pirarucu being sold in other fish shops around the same time through advertisements placed in Aqualife. Altogether, it is estimated that at least fifty to sixty Pirarucu were imported in 1981.

Since then, one tropical fish expert interviewed for this report estimated that between October 1982 and May 1983 approximately seventy Pirarucu were imported into Japan, many of them with Peruvian export permits. However, as mentioned earlier, Peru prohibits the export of Pirarucu, so the legitimacy of these export permits is doubtful.

Dried tongues and scales of the Pirarucu are also occasionally imported into Japan, but Customs seems to be unaware of this trade. In July 1983 a one metre long tail, and the tongue and scales of a Pirarucu were imported into Japan for display at the "Amazon Exhibition" held at the Takashimaya Department Store in Tokyo. These products passed through Customs without question as officials were unaware that the articles were subject to CITES controls.

TABLE 3

Fish Identified in Market Survey

Size	GREEN AROWANA Shop	Stock	RED AROWANA Shop	Stock	Shops Total	Total	PIRARUCU Size	Total
8 - 10cm	37	(20)	99	(9)	136	165	10 - 15cm	3
18 - 25cm	10	0	23	0	33	33	30 - 70cm	3
35cm +	14	0	15	0	29	29	80cm +	3
TOTAL	61	(20)	137	(9)	198	227		9

Figures represent fish seen, bracketed figures represent specimens not actually seen, but stocks reported by shop owners.

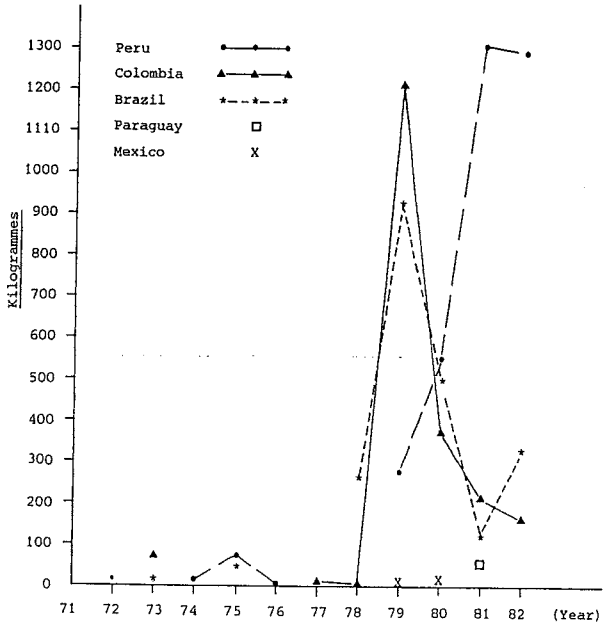
Commercial Trade In Other CITES Fish

Seven other species of ornamental fish included in the CITES Appendices are imported into Japan. South American tropical killifish Cynolebias spp., of which five species are listed on CITES Appendix II, are being bred in Japan at the Osaka Tropical Oviparous Research Centre and they are sold by mail order. When imported from overseas, these species most often come from the American Killifish Association. As these fish do not travel well, they are normally purchased as eggs which can survive out of water for long periods of time.

Five or six years ago, between forty and fifty Blind African Barbs (Caecobarbus geertsi) were imported from the Federal Republic of Germany. This species is endemic to Zaire and was virtually unknown in Japan at the time. Then in 1981, the previously mentioned Sanwa Kogyo Co. collected twenty to thirty Blind African Barb and exported them from Kenya or Tanzania to Japan (Sato, 1981). A year earlier, Sanwa Kogyo Co. had established bases in Africa, as it had done in South America, to facilitate direct exportation to Japan.

In 1983 five Australian Lungfish (Neoceratodus forsteri) were imported into Japan and sold for Y2 million (US$8500) each. Because available information is somewhat vague, neither the route nor the country of export of these fish has been identified.

Fig. 2
Japan's Tropical Fish Imports
(South America)



Year	Peru	Colombia	Brazil	Paraguay	Mexico
'71	0	0	0	0	0
'72	19	0	0	0	0
'73	0	70	10	0	0
'74	18	0	0	0	0
'75	71	0	46	0	0
'76	7	0	0	0	0
'77	0	12	0	0	0
'78	0	5	261	0	0
'79	275	1217	929	0	2
'80	550	374	498	0	4
'81	1311	213	131	56	0
'82	1293	163	325	0	0

All figures represent kilogrammes.
Source: Nihon Boeki Geppyo Data (Japanese Customs Data).

CITES Annual Report Data

According to Japan's 1981 CITES annual report compiled and published by the Ministry of International Trade and Industry (MITI), two Pirarucu were imported from Brazil. However, the Brazilian 1981 CITES annual report does not list any exports of Pirarucu to Japan, and Brazilian national law prohibits the export of this species.

The findings from the zoo and aquarium survey indicated that ten Pirarucu were purchased from dealers in 1981. A further check revealed that two of the four aquaria which acquired Pirarucu in 1981 purchased eight young fish which must have been imported in 1981 despite their absence from the Japanese annual report. Moreover, as mentioned earlier, it is estimated that fifty to sixty Pirarucu were actually imported in 1981.

As for Asian Arowana, there is no record of this species being imported in 1981 in the Japanese CITES annual report, nor is there any record of the twenty to thirty Blind African Barb which are believed to have been imported from Africa that year, however, CITES listing of this species didn't come into effect until 6 June 1981. The 1981 CITES annual reports for Indonesia, Malaysia, and Hong Kong do not list any trade in Asian Arowana. The Japanese CITES annual report for 1982 records imports of 2202 Asian Arowana from Indonesia, Taiwan and Hong Kong. However, Hong Kong's 1982 CITES annual report does not record any transactions in this species, and the Indonesian report is not available.

Customs Seizures

On 9 October 1982 two men were caught by Osaka airport Customs officers attempting to smuggle in 174 Asian Arowana from Singapore. The men had tried to bring the fish into Japan inside a vinyl bag placed in a heated carry-on box. When discovered, they identified the fish as 'catfish' for their personal collections. They claimed to know nothing of CITES and said they had purchased the fish for Y500 000 (US$2130) in Singapore.

Since there were no facilities for keeping such a large number of fish at the airport, Customs allowed the men to take the fish home on the condition that they returned all of the fish, including any that had died, at a specified later date. However, only seventy-four fish - seven 30cm long and sixty-seven 10cm long - were returned to Customs at the appointed time, and many were reported to appear damaged. While the fate of the other 100 fish remains undetermined, it is strongly suspected that they were sold or traded to dealers and collectors. Moreover, the men felt that they were being victimised since they alleged that so many other fish dealers in the area were doing the same thing. Since they relinquished their 'rights of possession', there were no further charges. The seventy-four forfeited Asian Arowana were given to the Suma Aquarium in Kobe. It is interesting to note that when the event was reported in the Japanese media, on 19 October 1982, there was no mention of the fact that 100 of the seized fish were not returned. The retail value of these fish was at least Y3 million (US$12 765), a figure six times the stated cost of the entire shipment. It is very likely that high profits were ultimately realized despite the intervention of the authorities.

Another confiscation occurred at Narita International Airport on 7 November 1983. Again, the incident involved two men returning from Singapore, again with seventy-two Asian Arowana packed in plastic bags in a whisky box. The men claimed that they were importing 'Angelfish' and then later, 'Golden Arowana', a species supposedly not covered by CITES. However, Customs accurately determined that the fish in question were included on Appendix I of CITES as Scleropages formosus. The fish were forfeited to Customs and ultimately placed at the Ueno Zoo Aquarium for care. The men were charged with false declaration, a violation of

Article 110 of the Customs Tariffs Law, and obliged to pay Y500 000 (US$2130), the maximum penalty. In contrast, the retail value of these fish is estimated to be Y2 880 000 (US$12 255).

TRAFFIC (Japan) has also learned of another recent seizure in January 1984, again in Osaka, but the details of this case are not yet known.

Customs Problems and CITES Implementation

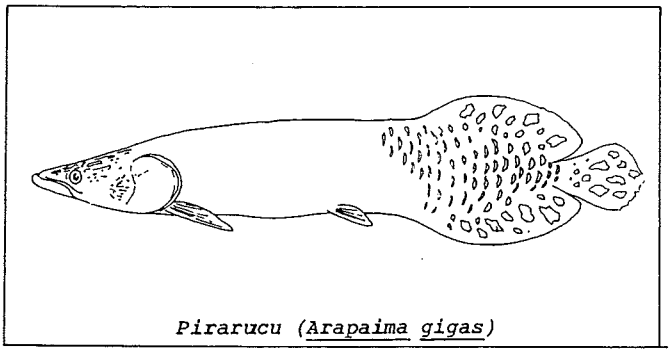
Recent seizures notwithstanding, the question naturally arises as to why the importation of Asian Arowana and Pirarucu continues outside of CITES controls. While the remote possibility exists that some trade may be legal, the available evidence overwhelmingly indicates that both species are regularly brought into Japan as part of an illegal commercial trade. Export document verification and species identification deficiencies on the part of Customs could account for part of the problem. The availability of too many ports of entry - a total of 123 - and inadequate domestic legislation with which to enforce CITES also contribute to ineffective implementation of the Convention in Japan.

Species Identification

In order to assist Customs officers with the identification of species controlled by CITES, MITI has prepared the 'Washington Treaty Identification Manual', which appropriately includes both the Asian Arowana and the Pirarucu.

In the looseleaf manual, the Asian Arowana is identified in English as the 'Green Arowana' and in Japanese as both 'Green Arowana' and 'Red Arowana'. The size of the Asian Arowana is listed as being 50-90cm. The species is illustrated as an adult by a pen and ink drawing along with comparative reference drawings of three other Osteoglossidae species, the Arowana, Nile Arowana, and the Barramundi.

For the Pirarucu, the species is identified in English as 'Arapaima' and 'Pirarucu', and in Japanese by those names, plus the name 'Cowfish'. The size of the fish is given as 2-2.5 metres with a weight of 90kg. The comment, "there is no large freshwater fish with the same characteristics as this species", is included in the description of the species. A colour photograph of two mature fish illustrates the Pirarucu.



Pirarucu (Arapaima gigas)

The reference materials presented in the MITI identification manual, while well intentioned, could handicap accurate species identification by Customs for two reasons. First, using the adult fish as the standard for identification, ignores the fact that most of the import trade in these species involves very young fish.

TABLE 4

1982-1983 Retail Prices of Bonytongues (Osteoglossidae) in Japan

Arowana (O. bicirrhosum)		Black Arowana (O. ferreirai)
6cm	3000 - 4000	5000 - 6000
20cm	10000 - 15000	20000
Asian Arowana (S. formosus)		Pirarucu (A. gigas)
	Green / Red	
10cm	30000 / 50000	120000 - 180000
20cm	80-100000 / 200-250000	
35cm +	180000+ / 600000	
50cm		600000
1 metre		1000000
Northern and Spotted Barramundi (S. jardini/S. leichardti)		
12cm	150000 - 200000	
40cm	250000 - 300000	
Nile Arowana (H. niloticus)		
10cm	50000	

Figures represent Japanese Yen (Y235=US$1).

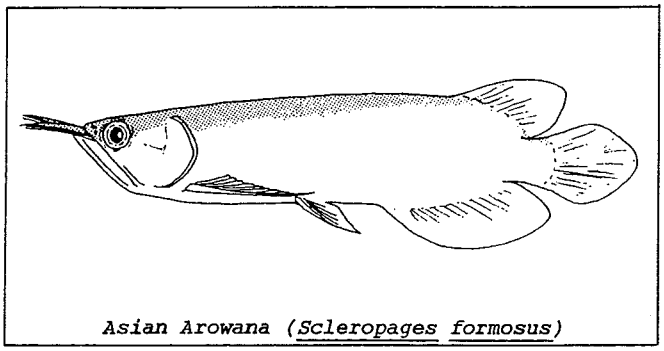
Approximately 70% of the Asian Arowana identified in the market survey were 8-10cm long, and less than thirty specimens were larger than 35cm. While all Osteoglossidae species are large, with distinct shapes as adult fish, this is not true when the fish are young. Further, with the exception of the Black Arowana, the colour of young fish is much less vivid than that of the mature adult. Since both the Asian Arowana and the Pirarucu have been imported in groups mixed with large numbers of other species it is very likely that they would go unnoticed by Customs officers who lack expertise in fish identification.

The second problem with the MITI identification manual with respect to the Asian Arowana, is that it fails to include other synonyms under which the species is commonly traded. These include the names Asian Bonytongue, Malayan Bonytongue, Orange Arowana, Silver Arowana, Golden Arowana, Golden Dragon Fish, and Emperor Fish, plus other local words such as Pla Tapad, Peyang Alaya and Ikan Kelasa.

While Customs documents for CITES should technically include the scientific name of the species, dealers indicate that English common names are sufficient for Customs purposes in Japan. According to various other sources, including an article in Aqualife (Matsuzaka, 1981a), Customs authorities rely primarily on comparing the invoice of the importer with the invoice of the exporter for their inspection. As a result, dealers can arrange beforehand to have the name of a protected or controlled species changed in order to avoid problems. As with the cases involving seizure discussed above, dealers have deliberately attempted to disguise trade in CITES-listed species by using false names or synonyms not given in the Customs manual.

CONCLUSIONS

The findings presented in this report reveal the existence of a significant and persistent illegal Japanese trade in the Appendix I Asian Arowana and, to a lesser extent, the Appendix II Pirarucu. Additional discrepancies have also been noted with respect to other trade in CITES-listed tropical fish species.



Asian Arowana (Scleropages formosus)

While Japanese Customs has actually seized more than 146 Asian Arowana over the last two years, surveys of commercial tropical fish shops in the Tokyo metropolitan area reveal that a considerable trade is, in fact, reaching the market place to meet a strong consumer demand which, the evidence indicates, has grown since CITES acceptance to include many younger Japanese. Much of the trade exists through the circumvention of CITES controls, although some trade in 1982 was allowed by the Japanese CITES Management Authority. Government officials maintain that no import permits have been issued since then, so all recent trade can be regarded as illegal. Altogether, illegal importation of the Asian Arowana is suspected to involve over 1000 fish annually with a retail value of over Y56 million (over US$250 000). The evidence gleaned from confiscations strongly implicates Singapore as the centre for most of the traffic, but the Japanese CITES annual report identified Indonesia, Taiwan and Hong Kong as exporters of the species in 1982. More recent information indicates some importation from Thailand is now occurring, although hard evidence for this is lacking at the moment. Nonetheless, a shift in the trade to Thailand and other points in south-east Asia could actually be occurring, since the Singapore Government in early 1983 issued warnings to local dealers to curtail all traffic in Asian Arowana.

Since that time, the method of operation for illegal trade originating from Singapore seems to have changed to involve couriers carrying the fish in their personal possessions to Japan, rather than relying on normal commercial export channels using 'captive-bred' certificates and export documents as had been done in 1982 and before.

Immense profits keep commercial interest in the species high in Japan. After acceptance of CITES, the value of the Asian Arowana increased; today the species, particularly the Red type, is one of the most expensive tropical fish in trade in Japan. According to one specialist contacted for this report, the import ratio of Red Arowana to Green Arowana was 1:4, before CITES acceptance, primarily because the Green type is more abundant in the wild. After acceptance, however, the resulting illegal traffic in Asian Arowana changed to favour the more expensive Red type. The results of the market survey revealed a ratio of 2:1 in favour of the Red type.

Unfortunately, there are very few data at all regarding the status of the Asian Arowana in the wild, but the shift in colour-type preference could hold adverse implications for the survival of the Red variety. It is not known whether colour variation in the Asian Arowana is because the populations are polymorphic or because they are geographically variable. In either case, dealers in Japan mentioned that the Red Arowana is becoming more difficult to obtain. Sources contacted at World Wildlife Fund-Malaysia confirm that the type known as the Red Arowana is becoming rarer in the wild in Peninsular Malaysia, an almost certain source, along with Indonesia, for the traffic coming via Singapore.

It does appear that since the inclusion of the Asian Arowana on Appendix I of CITES, rather than an increased protection being provided for the species, an increasing Japanese consumer demand has ironically stimulated exploitation. Moreover, available information seems to indicate that most of the illegal international traffic in Asian Arowana is coming to Japan.

The smaller illegal trade in the Appendix II Pirarucu remains less documented. There is not a strong consumer demand for this species in Japan; this, combined with the great distance from South American source countries, the exceptionally large size of full grown fish and possibly the very high price, can all be regarded as ameliorating factors which restrict the trade largely to specialist collectors. Brazil, Peru, and possibly Colombia are sources for the Japanese trade which is estimated to involve less than 100 fish annually. Taiwan is also suspected to be a transit point in the trade.

Regarding other Osteoglossidae species, it is estimated that approximately 10 000 Arowana and 3000 Black Arowana are imported annually into Japan. Although these species are not subject to CITES controls, the trade in the Black Arowana is cause for some concern. It has a very limited distribution, and local depletion has been reported recently; collectors have had to go upstream for more than two weeks in order to gather sufficient numbers of this species where previously this was not the case (Matsuzaka, 1981a). Because holding facilities during collection are inadequate, it is estimated that 90% of the fish die before exportation (Azuma, 1979; Matsuzaka and Taki, 1983). If this is the case, it would be necessary to catch approximately 30 000

TABLE 5

CITES-Listed Fish in Japanese Aquaria

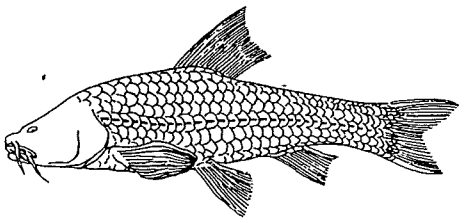
Year of Acquisition	1974	1975-10/1980	11/1980*-1981	1982	1/1983-4/1983	TOTAL
Asian Arowana	0	12	0	81	0	93
Pirarucu	12	23	10	16	7	68
Australian Lungfish	3	6	2	0	0	11

* CITES becomes effective in Japan

Black Arowana every year for the Japanese trade alone. Since this species has a restricted habitat and is difficult to breed in captivity (although few attempts have actually been made), there is concern that the present level of exploitation may be having a detrimental impact on the survival of the species. In order to control this trade and acquire more accurate statistical data, the Black Arowana should be considered as a candidate for an Appendix II listing on CITES.

A small and largely unknown trade also involves other CITES-listed species. Of particular concern is occasional traffic in African Blind Barb and Australian Lungfish, which apparently has taken place without CITES controls in the past.

And finally, of overall concern, is the general state of CITES implementation in Japan which affords a situation not wholly unfavourable to the perpetuation of illegal trade in these and other species of threatened wildlife. The absence of clear definition for fundamental CITES procedures and administrative lines of responsibility for handling routine problems greatly complicates efficient control of Japan's wildlife trade.



African Blind Barb (Caecobarbus geertsi)

Limiting ports of entry, more diligent export document verification and species identification practices on the part of Customs, and the enactment of stringent penalties for offenders would improve CITES implementation in Japan tremendously.

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All illustrations were drawn by Shinobu Matsumura except for the African Blind Barb.

Australian Bird Smugglers Prosecuted

Two US citizens recently became the first people to be prosecuted under Australia's new Wildlife Protection (Regulation of Exports and Imports) Act 1982. David Craig Frye of Clearwater, Florida and Reeda Lynn Spurgeon of Indianapolis were apprehended by Customs officers at Sydney Airport on 9 July 1984 whilst trying to smuggle out of the country two Black Cockatoos (Calyptorhynchus funereus), two Major Mitchell's Cockatoos (Cacatua leadbeateri) and one Gang-gang Cockatoo (Callocephalon fimbriatum). The birds were found wrapped in stockings at the bottom of Reeda Spurgeon's bag. The couple were arrested under Section 21 of the Act. They appeared at St. James Court of Petty Sessions the next day where they pleaded guilty and requested that the matter be dealt with summarily. However the Crown, as prosecution, opposed this and the case was referred to the Federal court for sentencing on 24 July.

Frye and Spurgeon had arrived in Sydney from the USA on 8 July 1984 and had been under Customs surveillance until they attempted to leave the next day. Frye had made another brief visit to Sydney only a week earlier on 30 June and again had left the following day. After his departure, it was suspected from evidence found in his hotel room that he had been smuggling fauna. Subsequent investigations revealed that he had visited a pet dealer and purchased six Galahs (Eolophus roseicapillus), four Sulphur-crested Cockatoos (Cacatua galerita) and one Major Mitchell's Cockatoo.

Frye, who had been charged both with exporting and attempting to export fauna without a permit, failed to appear in court on 24 July and has not been seen since. Although his passport was confiscated at the time of his arrest, it is not certain whether he is still in Australia. Spurgeon, who did appear in court, received only a two year good behaviour bond. She returned to the USA the next day. The maximum penalty for an offence under the Act is A$100 000 or five years in jail. The Crown is appealing against the leniency of Spurgeon's sentence.

Frank Antram, Director, TRAFFIC (Australia)

Bird Bill

A Bill has been passed to prohibit the sale of live wild birds in New York State, USA. This will come into effect from 1 November 1985.

A new section has been added to the existing legislation ruling that no person, except as permitted by rule and regulation of the Department of Environmental Conservation, shall sell live wild birds; birds born and raised in captivity are exempted from this law.

World Trade in Monitor Lizard Skins 1977 - 1982

by Tim Inskipp

INTRODUCTION

This report is an amended extract of a report produced by WTMU, commissioned by the CITES Secretariat, for the CITES Technical Committee meeting in June 1984. The original report addressed the interpretation and perception of the 'high trade-volume issue'.

For this purpose we produced minimum estimates of world trade volume in the three most heavily traded species of Varanus.

METHODS

For the compilation of this report, data from the annual reports of CITES Parties on transactions in Varanus spp. were examined for the years 1977 to 1982. Only the primary commodity was considered. Thus reported trade in 'skins' was analysed and transactions involving manufactured goods, such as 'handbags' and 'shoes', were ignored in order to avoid counting the same material twice.

All reported transactions were tabulated and analysed by computer. Figures of all reported imports to each country were compared with reported exports/re-exports to that country from each of the other states. The largest of these two figures was taken as the minimum volume of imports. By summing these, each country's minimum gross imports were calculated, and also, by a similar process, its gross exports.

A comparison of each country's gross imports with its gross exports indicated its net imports or exports. All net imports were summed to give a minimum estimate of the world volume of trade. Apart from the usual problems with the analysis of CITES statistics, mainly the failure of Parties to report at all or to report transactions correctly, this type of analysis is subject to some additional limitations.

One of these is the possibility of specifying the same shipment in different units. Thus if the importer records it as '100 skins' while the exporter records '50 kg of skins' these two figures will be treated separately and will be summed in the final analysis. An attempt was made to eliminate such instances of double-recording but it was found that they represent only a small proportion of the total trade and are therefore insignificant in comparison with the other inherent errors.

All measurements of length were converted to m, area to m^2 and weight to kg. However, there are still considerable problems in relating such units to the number of animals involved. The use of a mean skin size to convert length or area to numbers of skins may not be justified as different countries may trade in different sized skins and the size may change from year to year. Conversion of weight measurements to number of skins is even less certain as this depends on the method and degree of preservation as well as the size of the skin. With this in mind, however, conversion factors were employed in estimating the numbers of animals involved in cases where units other than numbers of skins had been reported. The estimates of the mean sizes used were (a) length: 0.25 m, (b) area: 0.03 m^2, (c) weight: 0.06 kg (WTMU files). The figures thus obtained are annotated with asterisks in Table 2.

The extent of the reporting by Parties has been summarised (Table 1), and a table has been produced (Table 2) indicating the major importing and exporting countries and the most frequently cited countries of origin for the trade in whole skins of the three species most commonly recorded in the trade: Varanus exanthematicus (African Savanna Monitor), V. niloticus (Nile Monitor) and V. salvator (Water Monitor). Trade in cases where the species was not specified (recorded as Varanus spp.) was also analysed because it seemed likely mainly to involve the three above-named species.

RESULTS

The information on CITES trade in this genus has previously been summarised for the years 1975-80 (Anon, 1983a), but not in the detail given here.

V. exanthematicus occurs throughout sub-Saharan Africa with the exception of Congo, Equatorial Guinea, Gabon and Liberia (Groombridge, 1983). Little appears to have been published on its status in the wild though it has been regarded as vulnerable outside game reserves in South Africa (McLachlan, 1978). It is totally protected in nine countries; partially protected and/or the trade is regulated in a further nine countries; the protection status in the remaining nineteen countries is not known.

The main exporting countries during 1977-1982 were Italy (27.3% of the gross trade of 581 244 skins), Spain (18.0%), UK (15.6%) and Switzerland (14.6%). The main importing countries were the USA (36.8%), F.R.Germany (15.8%) and Italy (14.7%). The trade largely originated in Nigeria (69.9%), with very few skins from other source countries: South Africa (0.8%), Sudan (0.4%), Senegal (0.1%), and Mali (one skin). Some skins were from unknown countries of origin (14.7%) and a few others were stated as originating in Canada or one of four European countries (1.7%). Quite a few (12.2%) were reported as originating in Indonesia, Philippines, Singapore and Thailand; it seems likely that these were misidentified V. salvator skins. This includes 46 000 skins reported by France in 1977 as exports to Switzerland. The countries involved in these transactions are included in square brackets in Table 2. If these transactions are removed from the totals, the pattern of trade becomes more regular with an approximately ten-fold increase in numbers of skins from 1977 to 1980, probably mainly due to improvements in the extent and quality of reporting. After a peak in 1981, there was a sharp decline in trade in 1982 (less than 9% of the 1981 figure). The reason for this is not known but, since there are virtually no recorded imports direct from Nigeria in any year, it seems unlikely that it is a result of the CITES Notification to the Parties relating to trade from Nigeria (No. 218, dated 28 May 1982). This Notification informed the Parties that no valid permits had been issued by the Nigerian Management Authority since July 1975 when the Convention entered into force. It seems unlikely that the decline is associated with changes in fashion or the general recession in world trade (cf. Tupinambis trade - Hemley, 1984) because the same decline is not apparent in the trade of V. salvator.

Varanus niloticus also occurs virtually throughout sub-Saharan Africa with the possible exception of Burundi, and also extends north to Egypt (Groombridge, 1983). The only published information on status in the wild that has been traced refers to South Africa where it has been regarded as vulnerable outside game reserves (McLachlan, 1978). It is totally protected in eleven countries; partially protected in a further ten countries; the protection status in the remaining twenty countries is not known.

The main exporting countries during 1977-1982 were France (53.0% of the total gross trade of 2 271 597 skins), Nigeria (14.3%) and Italy (10.6%). The main importing countries were Italy (57.3%), Switzerland (18.4%) and the USA (9.6%). The trade originated in Nigeria (37.5%), Sudan (25.4%), Mali (8.8%), Cameroon (3.1%), Chad (0.2%), South Africa (0.1%) and Egypt (0.1%), with very small numbers from Kenya, Uganda, Zimbabwe, and

Botswana. Some skins were from unknown countries of origin (15.5%) and some were stated as originating in one of seven European countries (8.4%). A very small proportion (0.6%) apparently originated in Indonesia, Philippines and Singapore; these probably refer to some other species of Varanus. The pattern of trade is similar to that in V. exanthematicus except that in 1981 there was a 15% decline compared with the 1980 figure, and in 1982 there was a further 38% decrease.

Varanus salvator occurs in Sri Lanka, and from north-east India east to Burma and China, and south-east through Bangladesh, Thailand, Laos, Kampuchea, Vietnam, and Malaysia to Singapore, Indonesia and the Philippines (Groombridge, 1983). Little seems to have been published on its status in the wild; it has been regarded as common in Thailand (Boonsong, 1969). It has apparently become much less common or even entirely disappeared in some local areas during the last few years (Auffenberg, 1982). It is totally protected in Bangladesh, India and Sri Lanka and prohibited from export in the last two countries; partially protected in Indonesia and Malaysia; the protection status in the remaining countries is not known.

The main exporting countries during 1977-1982 were Singapore (25.0% of the total gross trade of 2 053 799 skins), UK (20.2%), Japan (19.3%) and Thailand (7.5%). The main importing countries were the USA (48.8%), UK (14.7%) and Japan (7.8%). The trade originated in Indonesia (28.8% of the total gross trade of 2 053 799), Singapore (21.9%), Thailand (10.9%), Philippines (3.3%), China (2.0%), Malaysia (1.0%) and Brunei (0.5%), with very small numbers from India (148) and Bangladesh (twenty). Quite a high proportion (23.1%) was from unknown countries of origin, these largely being exports from Singapore and the UK. A few (4.8%) were stated as originating in one of eleven countries in which the species does not occur. These included 100 skins origin Argentina, and 250 skins origin Paraguay which perhaps were more likely Tupinambis spp. The pattern of trade is somewhat different from that of the other two species: the number of skins remained more or less static in the years 1977, 1978 and 1979 (if one assumes that the 46 000 V. exanthematicus exported in 1977 by France, origin Indonesia, were in fact V. salvator); in 1980 the volume had increased threefold and a similar rise was apparent in 1981. However, the 1981 figure would be vastly inflated by the inclusion of the estimated one million skins reported as Varanus spp. which very likely were V. salvator skins. The total of perhaps two million skins traded in 1981 makes this species probably the second most important lizard used in the skin trade. In 1982 the estimated total trade was about 875 000 skins taking into account those reported as Varanus spp.

Some published statistics provide an indication of the minimum nature of these figures in relation to the total world trade in the species. An estimated 94 528 skins of V. salvator were exported from Bangladesh during the year July 1978 to June 1979 (Gilmour, 1984), yet this country did not feature at all as an exporter, or a country of origin, in the CITES records for either year. Export figures for Malaysia are only available for two years (17 796 skins in 1981, and 19 957 in 1982 - the latter reported as Varanus spp. but presumably V. salvator), but it is quite likely that a similar number was exported in each of the other four years. According to Khan (1969) an annual average of nearly 40 000 skins was exported from 1963 to 1967.

DISCUSSION

Any analysis using data contained in CITES annual reports is complicated by a considerable variety of factors. Some of the reasons for non-correlation of reported imports and reported exports/re-exports have already been discussed (Anon., 1983b). Another factor is that annual reports produced by some Parties are based on permits issued rather than permits used. In only a few cases is this stated by the Party concerned.

The use of conversion factors to compensate for cases where different units have been used to record trade in the same species has already been mentioned. It is apparent that the information available on mean sizes of the products of CITES-listed species in trade is too inadequate to formulate accurate conversion factors. The measurements upon which which such factors could be based could be collected by the enforcement agents of Party States.

Another problem is the misidentification of specimens in trade; this may be accidental or, in some cases, a deliberate attempt to circumvent legislative controls applying to certain taxa in certain countries. An example of probably accidental misidentification is the confusion between Varanus exanthematicus and V. salvator. In 1977 78% of the gross trade in the latter species was probably wrongly identified.

From the detailed analysis above, it may be seen that the accuracy of the data is severely impaired by poor reporting. The poor quality of the data means that, for Varanus, we do not even have a good guide, from the CITES data alone, of the minimum trade volume.

In the case of Varanus exanthematicus, as very little of the reported trade involves producer countries, it is not possible to say when the skins being traded were taken from the wild. This precludes the establishment of a relationship in any year between trade volume and size of the wild population.

It is appreciated that the situation for Varanus may not reflect that for other CITES-listed animals. In general it can be said that where there are good data, permitting an estimate of minimum volume entering trade for the first time, this may serve as a guide to the absolute minimum population for that year. Without knowing something of the age distribution of the animals represented in the trade and those in the wild, as well as their fecundity and other aspects of their biology, it is not possible to draw any further conclusions about the effects of trade on the wild populations. ▷

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TABLE 1

Summary of reporting by CITES Parties for trade in whole skins of Varanus spp.

Year	No. of Parties	No. of Parties that have submitted reports	Number of Parties reporting trade in:				Number of countries reported trading in:				Number of summarised transactions			
			V.exa.	V.nil.	V.sal.	V.spp.	V.exa.	V.nil.	V.sal.	V.spp.	V.exa.	V.nil.	V.sal.	V.spp.
1977	40	29	2	3	4	3	8	8	10	7	11	18	17	5
1978	47	32	2	5	3	3	8	11	14	16	11	31	25	20
1979	55	33	5	6	6	-	12	14	17	-	17	41	69	-
1980	61	32	7	8	10	3	15	17	22	5	35	78	89	4
1981	74	39	6	7	10	3	17	22	21	15	47	83	108	23
1982	77	33	5	8	8	4	13	19	29	25	22	80	95	90

TABLE 2

Minimum estimates of the number of whole skins of Varanus spp. reported in trade

	Varanus exanthematicus		Varanus niloticus		Varanus salvator		Varanus spp.	
	Main importers (& origin)	Main exporters (& origin)	Main importers (& origin)	Main exporters (& origin)	Main importers (& origin)	Main exporters (& origin)	Main importers (& origin)	Main exporters (& origin)
1977	[CH(ID)] DE(NG) GB(NG)	FR([ID]/NG)	CH(NG/ML/DE) IT(NG) US(?)	FR(NG/ML) GB(?) DE(CH)	US(?) CH(ID)	GB(?) FR(ID)	DE(FR/IT)	FR(FR) IT(IT)
TOTAL	56186		60926		42660		11525	
1978	CH() GB(NG/FR) DE(?)	IT(?) DE(NG) FR(GB) GB(CA/?)	CH(NG/ML/CM) IT(NG/ML)	FR(NG/ML/CM)	GB(TH/?) US(?) CH(?)	GB(?) SG(?) TH(TH) FR(?)	DE(FR/IT/ID/SG/ZA)	FR(FR) IT(IT) ID(ID) SG(SG) ZA(ZA) US(XM)
TOTAL	16357		82565		96185		39607	
1979	DE(NG/?) AT(NG) CA(?)	IT(NG/CH) GB(?)	CH(FR) IT(CM/ML/NG)	FR(FR/CM)	US(?) GB(?/SG/TH) HK(?/ID/TH) CH(ID) DE(?)	GB(?) SG(?/SG) US(ID/TH) TH(TH)	CH(GB)	GB(GB)
TOTAL	36198		123199 + 8750*		90679		550	
1980	IT(NG) DE(NG/?) GB(NG) US(?/NG)	CH(NG) IT(NG/?) NG(NG) GB(?)	IT(NG/ML) US(?/SD) CH(FR)	NG(NG) FR(FR/NG/ML) GB(?)	JP(?) US(ID/SG) GB(SG/TH)	SG(?/SG/TH) GB(ID/SG) JP(ID/SG) TH(TH)	US(?)	JP(?)
TOTAL	111572		634639 + 20*		272183		33803 + 86000*	
1981	US(NG) DE(NG) [HK(ID/SG/PH)]	ES(NG) IT(NG) GB(NG/US/?ZA)	IT(SD/NG/?) CH(NG/ML/ES) US([PH]/SD/NG)	FR(SD/NG/?) CH(SD/NG) IT(NG)	US(ID/SG/TH)	JP(ID/SG) ID(ID) GB(SG) SG(ID/?)	JP(ID/PH) US(JP)	JP(JP) SG(ID) PH(PH)
TOTAL	215952 + 1000*		542588 + 3100*		770554 + 95000*		291518 + 800000*	
1982	US(NG)	GB(NG) DE(NG)	IT(SD/?/ML/NG) CH(NG/ML/CM/SD) FR(SD/NG/CM) DE(SD/NG)	FR(SD/?/NG/ML/CM) IT(SD/NG) ES(ML)	IT(ID) GB(SG/?) HK(PH/ID) US(?/ID/TH) DE(PH/SG/?/TH)	SG(SG/ID) GB(SG/?) FR(?/TH) JP(PH/TH)	JP(ID) US(ID/NG)	SG(ID) JP(ID/?/PH)
TOTAL	19183		336769 + 1500*		216994		662903 + 200000*	
'77-'82 TOTAL	455448 + 1000*		1680686 + 13370*		1489255 + 95000*		1039354 + 1086000*	

Index of ISO Country Codes Used in this Report

AT	AUSTRIA	GR	GREECE	PH	PHILIPPINES
CA	CANADA	HK	HONG KONG	SD	SUDAN
CH	SWITZERLAND	ID	INDONESIA	SG	SINGAPORE
CM	CAMEROON	IT	ITALY	TH	THAILAND
DE	GERMANY, FEDERAL REPUBLIC OF	JP	JAPAN	US	UNITED STATES OF AMERICA
ES	SPAIN	ML	MALI	XM	SOUTH AMERICA
FR	FRANCE	NG	NIGERIA	ZA	SOUTH AFRICA
GB	UNITED KINGDOM				

In cases where countries are in square brackets, the species identification is assumed to be incorrect (see text).
* skins reported in units of area or weight, converted to estimated numbers of skins (see text).

The European Trade in Sealskins

by Alexandra M. Dixon

INTRODUCTION

In the wake of effective anti-sealing campaigns and European legislation enacted in the past four years, the volume and pattern of trade in seal products, regardless of species, can be expected to have changed radically.

International commerce in the products of Harp Seals (Phoca groenlandica) and Hooded Seals (Cystophora cristata) up to 1978 has been well documented (Barzdo, 1980). Trade in significant numbers of Ringed Seal (Phoca hispida) and Cape Fur Seal (Arctocephalus pusillus pusillus) has been reported and South American Fur Seal, (Arctocephalus australis), Pribilof Fur Seal (Callorhinus ursinus) and Common Seal (Phoca vitulina) also appear in European trade to some extent (Barzdo and Caldwell, 1982).

Skins, oil and meat are the main products of seals. However, it is sealskins which are the most commercially visible product as well as the most extensively monitored. The best sources of published data are national Customs statistics, annual reports of CITES Parties and public sales records. These indicate the volume of sealskins in commerce but with few exceptions do not do so for seal oil, while seal meat is not apparently traded internationally on a commercial scale. In defining the limits of this report, it was decided to take advantage of the best data available and therefore to deal with the sealskin market since 1980.

The scientific nomenclature adopted follows Honacki et al. (1982).

METHODS

Data were collected from four main sources: Customs statistics, CITES Reports, catch statistics and interviews and correspondence.

Customs Statistics

Most European Customs statistics include a category for raw skins and another for dressed skins of Otariids and Phocids but do not distinguish the species. An exception is Norway whose statistics include separate headings for raw whitecoats (newborn Harp Seal pups) and raw bluebacks (Hooded Seal pups). From April 1983 the UK statistics included a single category for these two types of skin. In the case of processed skins, the quantity recorded in Customs statistics refers to the weight or to the number of pieces involved, which does not necessarily mean whole skins as it includes pieces and plates of skins sewn together.

The annual Customs statistics, where available, were examined for the years 1979-1983 for the countries of Europe and the major suppliers of sealskins (see Table 1).

CITES Reports

Both the Cape Fur Seal and the South American Fur Seal are included in Appendix II of CITES. All trade in these species involving a Party nation should be recorded in that nation's annual report to the CITES Secretariat. Accordingly, all CITES annual reports for the years 1979-1983 were examined for details of trade in skins of these two species and CITES Management Authorities in relevant countries were also contacted.

Fur Seal (Arctocephalus) © *J.R. Caldwell*

Catch Statistics and Kill Quotas

Sealskins traded in Europe come mainly from ten countries: Canada, Greenland, Iceland, Namibia, Norway, South Africa, UK, Uruguay, USA, and the USSR.

Catch statistics for Canadian and Norwegian sealing operations were obtained from Fisheries and Oceans Canada and the Royal Norwegian Ministry of Fisheries. The results of Government-controlled seal kills were also obtained from the United States Departments of State and Commerce and from the Marine Development Branch of the Department of Environment Affairs, South Africa, the latter of which supplied statistics for the South African populations only, not the Namibian. No reply was received from the Economic Secretary in response to requests for information on the killing of Cape Fur Seal in Namibia. The Industria Lobera y Pesquera del Estado in Uruguay was also contacted for information on the South American Fur Seal but no reply was received. It was therefore necessary to rely on the CITES annual reports for data on the trade in this species. Additional catch statistics were obtained from the FAO Yearbook of Fisheries Statistics.

Correspondence and Interviews

Letters were written to individuals or organisations who might possibly contribute information. In addition to contacts in F.R. Germany, Italy, Norway, the UK, Switzerland and Denmark, enquiries were made of furriers and leather dealers in Spain, the Netherlands, France and Belgium. The response rate, however, was not good from these countries.

Interviews with fur and leather dealers, CITES Management Authorities, trade officials and scientists were held in Denmark, F.R. Germany, Italy, Norway and the UK. Of particular value was the Frankfurt Fur Fair which provided a special opportunity to meet furriers. The most useful information and the most extensive co-operation was obtained through direct meetings.

TABLE 1
Annual Customs Statistics Consulted

Country	Year of statistics examined
Austria	*
Belgium/Luxembourg	1979-1983 Nov.
Canada	1979-1983
Denmark	1979-1982 (1983 n/a)
Finland	1979-1983
France	1979-1982 (1983 n/a)
F.R. Germany	1979-1983
Ireland	*
Italy	1979-1983
Netherlands	1979-1983
Norway	1979-1983
South Africa	1979-1983 Sept.
Spain	1979-1981
Sweden	1979-1982
Switzerland	*
UK	1979-1983 preliminary
USA	1979-1981

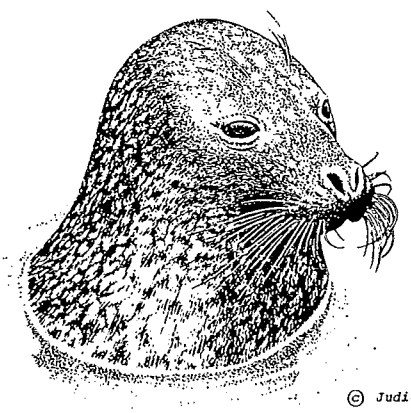
* no customs category which refers specifically to sealskins.
n/a: figures not available.

TRADE SUMMARY: BY SPECIES

Four species of seal are considered to be commercially important to European markets: Cape Fur Seal, Ringed Seal, Harp Seal and Hooded Seal; three additional species, South American Fur Seal, Pribilof Fur Seal and Common Seal, are of marginal importance. The pattern of commercial exploitation varies significantly from one species to another and each requires a separate explanation. However, the final products of these species supply a consumer demand that is susceptible to market influences which apply across the spectrum of the species involved. For example, anti-sealing campaigns which have been chiefly concerned with Harp and Hooded Seals have had a profound effect on the market for the skins of all seal species. This will be discussed later.

Fur seals produce a luxuriant pelt that is easily distinguishable from that of hair seals. The processing of fur seal skins is extremely specialised and is undertaken by only a few companies, the Fouke Fur Company in the USA and G.C. Rieber & Co. A/S in Norway being the principal ones. Cape Fur Seal, Pribilof Fur Seal and South American Fur Seal are the main species involved and all are used almost exclusively by the fur trade. There was a brief demand for fur seal skins from the leather industry just following World War II but this was short-lived (Whipps, pers. comm.).

Hair seals produce a more versatile skin that can be used either for fur or for leather. The coat of hair seals is more bristly than that of fur seals, a quality which makes their pelts suitable for a wider range of articles such as shoes, boots and wallets, all made with the hair on, as well as coats and jackets. Harp Seal, Hooded Seal and Ringed Seal are the species most frequently used.



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Cape Fur Seal
Arctocephalus pusillus pusillus

Cape Fur Seals are found on the coasts of South Africa and South West Africa/Namibia (King; 1983).

Source Countries

Under the Sea Birds and Seal Protection Act of 1973, killing of Cape Fur Seal in South Africa is controlled by the South African Government and is regarded as a culling operation necessary to control populations. The killing is contracted to private companies, and quotas are established by the Government.

Markets

South Africa does not have dressing plants that can deal adequately with Cape Fur Seal nor a market demand and, according to the Marine Development Branch in Cape Town, all the skins taken are eventually exported. Although other European countries feature to a small extent in the South African Customs statistics, the data indicate that a large proportion of the Cape Fur Seal skins has consistently been exported to Norway and F.R. Germany. However, this pattern may change owing to recent developments in the European market.

Cape Fur Seal skins are largely used in the manufacture of luxury clothing. The fur can either be left long or be sheared to produce a soft velvety material. A full length coat requires six to seven skins and the final product is heavy and somewhat bulky.

Interpretation of the CITES data from South Africa, F.R. Germany and Norway, augmented by additional data from other reports, indicates the following likely trade pattern for Cape Fur Seal entering the international market. However, it is important to bear in mind that the South African and the Norwegian figures refer to licences issued, not to actual trade.

1) Cape Fur Seals are killed in South Africa and Namibia.

2) Many skins taken in Namibia are exported to South Africa, some are exported elsewhere.

3) Skins taken in South Africa and those imported from Namibia are exported.

4) According to the South African CITES reports, the majority of the skins are licensed for export to F.R. Germany (e.g. 96 106 out of 102 933 in 1982). However, German CITES Reports record considerably smaller quantities of Cape Fur Seal entering Germany from South Africa - as much as 50 000 less in 1981. It is possible that the skins not accounted for by the German statistics are shipped from South Africa to a German freeport such as Hamburg, and then sent elsewhere without ever entering Germany. Thus, they would never be recorded by either the German CITES Management Authority or German Customs.

5) It appears that from this freeport (or bonded warehouse) the skins are shipped to Norway for processing by G.C. Rieber & Co. Norwegian Customs import data indicate quantities of sealskins originating from South Africa and Namibia, in some years concurrent with known kill figures. Norway's CITES Management Authority does not report imports, however they do record skins licensed for export. These totalled 31 321 Cape Fur Seal skins in 1981, 63 647 in 1982 and 23 005 in 1983, the bulk to F.R. Germany.

6) However, the dressed skins may not enter Germany but be kept in a freeport before being shipped to a garment manufacturer. This possibility is supported by the Tunisian CITES reports which indicate a level of imports of Cape Fur Seal skins consigned from Germany that is consistent with its re-exports to Germany of coats and jackets made from this species. However, the German CITES reports and Customs statistics do not record corresponding imports or exports.

South Africa has traditional trade understandings with F.R. Germany and partly for this reason has relied a great deal on the German fur industry to provide the European outlet for its sealskins. However, owing to the relatively rapid development of a market environment that largely rejects sealskins, the South African Government has suddenly been faced with the collapse of a European commercial demand for Cape Fur Seal. Thus, no sealing was undertaken in 1983 and, although South Africa has set a quota of 19 500 for 1984, this is more as a result of wildlife management policy than a response to market demand. Skins from previous years are being offered for tender in an attempt to dispose of old stocks. Reportedly there has been little response (Frayling, pers. comm.).

TABLE 2
Cape Fur Seal Take in South Africa

	Quota	% Achieved	Number killed
1980	32100	58.1	18618
1981	37100	85.8	31831
1982	40000	79.6	31840
1983	4500	0	0
1984	19500	n/a	n/a

n/a: figures not available.

Source: Marine Development Branch, Cape Town, South Africa.

Norway

The decline in the market for Cape Fur Seal skins is indicated by the reduced purchases of those firms which used to deal extensively in this species. In Norway, G.C. Rieber & Co. used to buy 20 000 skins a year which, once dressed, sold for about NKr125 (approx $25) each in 1980. Since 1981 the firm has not bought any and it is undecided about whether to buy any in 1984. Currently Rieber is selling old stocks at very low prices from NKr40-50 (approx. $5) each for raw skins (Rieber, pers comm.).

Between October 1983 and May 1984 the firm sold 11 000 Cape Fur Seal skins, mostly to German coat manufacturers.

South Africa's CITES report for 1982 shows the licensing for export of 6700 Cape Fur Seal skins to Norway. However it is possible that these skins, if exported, were shipped to Norway only to be dressed by Rieber & Co., but had been sold elsewhere.

Denmark

In Denmark the market for seal products is still relatively secure, although small. M. Levinsky, one of the major firms dealing in seal, bought 3500 Cape Fur Seal skins in the year 82/83 (E. Schöttlander, in litt.), all from G.C. Rieber & Co and plans to buy the same again in 1984 (H. Schöttlander, pers. comm.). According to Schöttlander, the market for manufactured coats is mainly within Denmark but also to a much lesser degree in Austria and Finland. Cape Fur Seal coats retail in Denmark for DKr5500-8000 (approx. US$520-700) which is unchanged from 1980 (E. Schöttlander, in litt.).

F.R. Germany

Within Germany, several firms, Denhardt-Seal, Foggensteiner and Levy & Co. amongst them, which have specialised in the sealskin trade, have experienced greatly reduced turnovers in sealskins since 1981. One firm, Sinclair, which dealt only in Cape Fur Seal has gone bankrupt (Langenberger, pers. comm.). Levy & Co. still has Cape Fur Seal garments for men (exhibited at the Frankfurt Fur Fair, April 1984), but by and large the fur is not furry enough for most women and it is very difficult for any furrier to sell clothes made of Cape Fur Seal (Thorer, pers. comm.). Denhardt-Seal used to deal in 30 000 Cape Fur Seal skins a year, but now "won't touch it" (Denhardt, pers. comm.). In Germany coats made of Cape Fur Seal have declined in price by 40% since 1980, from a retail price of about DM 3000 (approx. $1650) to about DM 1795 (approx. $615) today, if it can be sold at all (Denhardt, pers. comm.). The decline is due partly to a change in fashion but is widely believed, in the industry, to be mainly due to unfavourable publicity stemming from anti-sealing campaigns.

Other Countries

France does not appear to feature largely as a trader in Cape Fur Seal. France's annual reports to CITES for the years 1979 to 1982 record only the re-export to the UK in 1981 of fifty-nine skins and the re-export to F.R. Germany in 1982 of 400 skins. Nor do French CITES reports record any imports of sealskins coming directly from South Africa.

Switzerland's Customs statistics do not distinguish sealskins but its CITES report for 1982 shows the importation of twenty-three skins and of nine garments from South Africa. The 1979 CITES report for Denmark records the export to Switzerland of one coat, although this does not appear in the Swiss report for the same year. It thus seems that Swiss trade in Cape Fur Seal is very small. One of the few Swiss firms which still deal in Cape Fur Seal said that the skins are now commercially accepted only to a very limited extent and that he could expect to move about 200 skins in a year if he were lucky. As a result, he had not bought any for two years (Mayer, pers. comm.).

The CITES annual reports for the UK, Italy and other European countries all show imports or exports/re-exports of Cape Fur Seal which are incidental. With regard to Italy, it is possible that garments made of Cape Fur Seal are entering the market but it has been impossible to obtain any reliable information on the extent of this trade.

Pribilof or Alaska Fur Seal
Callorhinus ursinus

Pribilof Fur Seals are found in the North Pacific Ocean in Canadian, Japanese, Soviet and US (Alaskan) waters. Breeding occurs only in Soviet and US territories (King, 1983).

Source Countries

Under the fur seal treaty of 1911 and the Interim Convention on Conservation of North Pacific Fur Seals 1957 (currently under review), the USA and the USSR control and manage the populations of the Pribilof Fur Seal. Both nations share 15% of their take from these herds with Japan and Canada. The US Government is responsible for the annual sealing operations carried out on St Paul and St George Islands in the Pribilofs. In 1984, this kill was contracted out to native Aleuts who were paid a fee of US$500 000. According to press reports, this is the last year that the kill will be conducted and instead the Aleuts will attempt to develop a small-scale fishing industry.

Table 3 gives figures of Pribilof Fur Seals taken in

the Pribilofs. The majority of animals killed on St Paul Island, where the commercial kill is carried out, are bachelor males of three to four years old.

The skins are all dressed in South Carolina by the Fouke Fur Company, which holds exclusive rights on the process, and are then sold by auction. Canada and Japan may receive their respective shares either in skins or from the proceeds of the auctions. It is reported by members of the fur industry that the US Government is encountering severe difficulties in selling the sealskins and that as a result the Fouke Fur Co. is less willing to process them. The records of receipts from skin sales show a sudden fall in price per skin (Fig. 1).

Canada's share of the skins was formerly offered at auction by Hudson's Bay Co. in Toronto and might then be exported to Europe. However, since 1982 the company has encountered difficulties in selling the skins and now any sales of Pribilof Fur Seal that are undertaken are conducted by the Fouke Fur Company (Frayling, pers. comm.).

It is not apparent that any Pribilof Fur Seal skins taken in the Soviet kill enter European trade.

TABLE 3
US Take of Pribilof Fur Seals 1976-1984

	St Paul Island	St George* Island	Grand Total
1976	23096	200	23296
1977	28444	350	28794
1978	24885	298	25183
1979	25762	351	26113
1980	24327	350	24677
1981	23928	350	24278
1982	24468	350	24818
1983	25768	n/a	25768+
1984	22000**	n/a	

* Taken for subsistence purposes or for scientific research.
** Projected kill figure from press announcement by US Secretary of Commerce.
n/a: figures not available.

Source: Anon, 1983a.

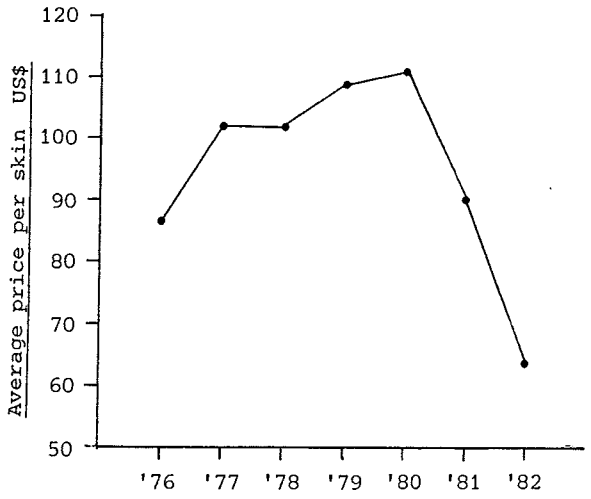
Markets

Although it is not so stated in US Customs statistics, most exports of dressed sealskins are likely to be of Pribilof Fur Seal as the US Marine Mammal Protection Act, 1972, severely restricts the species which could be involved.

According to US Customs export statistics for 1979-1981, the largest proportion of sealskins exported by the US to Europe went to Switzerland with large quantities also consigned to Italy and F.R. Germany. The Pribilof Fur Seal produces a pelt of a similar luxuriance and type to that of Cape Fur Seal and therefore supplies a similar market demand. It appears from the data that while Cape Fur Seal skins are used primarily by the Danish and German fur industries, Pribilof Fur Seals are utilised by Swiss and Italian as well as German furriers, to produce items comparable to those of Cape Fur Seal.

On the basis of the import statistics of European countries, and the Canadian CITES reports which include Pribilof Fur Seal in an annex, the scale of Europe's trade in this species is small and has been adversely affected by the same factors which have influenced the marketability of Cape Fur Seal. Most European furriers appear to feel that the limited availability of Pribilof Fur Seal and, more particularly, its poor commercial value in today's market greatly reduce its attraction.

Fig. 1
Value at auction of Pribilof Fur Seal skins



Source: Anon, 1983a.

South American Fur Seal
Arctocephalus australis

The South American Fur Seal occurs on the coasts and offshore islands of Peru, Chile, Argentina and Uruguay (King, 1983).

Source Countries

Uruguay is the only country known to be exploiting the species but there are very few reliable data available. Attempts to obtain information directly from Uruguay have been unsuccessful; CITES annual reports and FAO catch figures (Anon, 1983c) are the only sources available. FAO data show a decline in the catch from 10 496 in 1979 to 1375 in 1982.

Markets

CITES annual reports for 1980 to 1982 show an average of about 500 South American Fur Seal skins entering European trade annually, with F.R. Germany as the main destination. Figures are not available from Uruguay for 1983 but there is no evidence to suggest that this trade has increased.

Ringed Seal
Phoca hispida

The Ringed Seal is circumpolar in distribution and is found on the coasts of Alaska, Canada, Finland, Greenland, Japan, Norway, Sweden and the USSR (King, 1983). The species has traditionally been hunted by arctic natives and therefore a large number of skins are available annually.

Source Countries

Canada

Barzdo and Caldwell (1982) report that there has been an annual kill of around 75 000 Ringed Seals but that the number entering trade fluctuates considerably. There is no precise information available on the quantity of

skins entering European trade but the data imply that it is no longer substantial. This inference is supported by members of the fur trade.

Greenland

Ringed Seal skins are readily available from Greenland, as at least 40 000-50 000 seals are killed each winter to feed humans and dogs and the kill has been much larger.

The seals not only provide a means of survival but also one of the few possible sources of income. Blubber, meat and other products are utilised locally and only the surplus skins appear to enter trade (Skovhay, pers. comm.).

Markets

Skins offered by the Royal Greenland Trade Department (RGTD) are usually bought by Danish, Norwegian and a few German furriers. The pelts are suitable for more hard-wearing items than are fur seal skins, so are used for sports clothing and après-ski wear as well as for shoes and boots. Ringed Seal is also regarded by some furriers as a possible replacement for blueback in trimmings. However as for all seal species, the market for Ringed Seal is now poor. This has had serious economic consequences for the Greenland Eskimos.

Denmark

Skins from Greenland destined for international trade enter Europe through the RGTD and will normally be offered at one of two auctions held each year in Copenhagen. If the price offered is low, the skins may be bought by Greenlanders and re-imported to Greenland to be dressed and made into garments or boots with the hair on.

However, in 1983, the second auction was cancelled due to the very low prices offered for the pelts in the first sale. Some reports indicate that there is a stockpile of over 200 000 skins, mostly of Ringed Seal which the RGTD cannot sell at a sufficient profit.

Within Denmark the market for seal products is good. Because of Denmark's tie with Greenland, Danish companies feel an obligation to buy Greenland pelts, particularly when the market is so limited. Of these companies, M. Levinksy, S.Levitan, K.V. Stampe & Søinner and Mogens Alex Petersen are the principal buyers and all buy relatively large quantities of Ringed Seal skins. All, however, have experienced a drastic decline in their sales of sealskins since 1981. The buying and holding agent for K.V. Stampe, S. Levitan, used to purchase approximately 80 000 Ringed Seal skins (about 70% of the world market) every year from Greenland and Canada. Now he buys a maximum of 8000 Ringed Seal skins a year, all from Greenland (Levitan, pers. comm.), a reduction of 90%. Prices have declined as well; a Ringed Seal pelt that cost £16 (approx. $38) five years ago now costs about £4 (approx. $5) (Levitan, pers. comm.). However, Levitan feels that Ringed Seal is the only sealskin for which there remains an adequate market; other sealskins simply do not sell for a price which compensates for the activities involved in obtaining and marketing them.

Most of the skins imported into Denmark are made into coats and other garments and are sold domestically. Some are exported to F.R. Germany, Austria and Norway but according to both Levitan and Schöttlander, these are declining markets. Levitan (for K.V. Stampe) still sells about 50% of its products in Germany but the quantities involved are greatly reduced. In the late 1970s German fur retailers and department stores used to buy coats representing 50 000 - 60 000 skins from Levitan every year (Levitan, pers. comm.) Now, however, Levitan's apparent supply to Germany accounts for only about 4000 skins.

Norway

The only Norwegian company known to be buying Ringed Seal skins from Greenland is G.C. Rieber & Co A/S. At the May 1983 RGTD auction Rieber bought 3213 Ringed Seal skins; in addition 18 000 were bought by private treaty; at the May 1984 RGTD auction, the company bought 2119 Ringed Seal skins (Monson, pers. comm.). Due to prevailing market conditions, most of these skins will probably be added to Rieber's stocks rather than be sold immediately (Rieber, pers. comm.). Of those sold, roughly 60% will go to Germany for use in the shoe and boot making industry (see below). A little more than 21% will stay in Norway to be made into shoes and boots; shoes sell for about NKr250 (approx. US$30) and boots sell for Nkr400-500 (approx. US$48-60) a pair. France, Austria, Japan and a few other countries each obtain a small number of skins annually, the total for all being under 8000 skins.

F.R. Germany

Until recently, Germany used large quantities of Ringed Seal in its shoe industry. Most of the German Customs-reported sealskin imports in 1982 and 1983 were of Ringed Seal (Langenberger, pers. comm.). Several firms such as Schang Pfundstein and Luna Schuhfabrik specialised in seal boots. Pfundstein used to make 60 000 - 65 000 pairs of boots each year using mainly Ringed Seal (Laforce, pers. comm.) but has been forced into bankruptcy by the current market decline. Luna is also experiencing severe problems despite attempts to diversify. One fur trader, GEFU, in Frankfurt, dealt a great deal with the shoe manufacturers but says that now, regardless of species, the German shoe industry will not deal with seal in any significant amount (Laforce, pers. comm.). GEFU bought about 200 pelts at the RGTD auction in May 1984, although this probably included some beaters (Harp Seal pups that have moulted out of whitecoat but are less than a year old, with spotted coat).

Common Seal
Phoca vitulina

The Common Seal, (or Harbour Seal) occurs on the coasts of both sides of the North Atlantic and North Pacific Oceans (King, 1983). Skins of Common Seal enter trade in relatively small numbers (Barzdo and Caldwell, 1982).

Common Seal (Phoca vitulina)

Source Countries

Iceland

Iceland exports a few thousand skins each year to Europe which are likely to be mainly Common Seal (Barzdo, 1983). Icelandic Customs data indicate that from 1978-81, most exports of sealskins were destined for F.R. Germany and Denmark (Barzdo, 1983).

Greenland

Greenland reports the killing of 35 in 1980, 74 in 1981 (Anon, 1984) and 54 in 1982 (Anon, 1983c). These numbers are commercially insignificant and the skins are not believed to enter international trade. There is no indication that the level of killing has increased since 1982.

UK

Under the Conservation of Seals Act, 1970, the species is protected during the breeding season and licences may be issued during this time to permit the taking of pups. FAO statistics (Anon, 1983c) record that 383 were taken in 1980; 354 in 1981 and 7 in 1982, all in Scotland, none in England or Wales. In 1983 no licences were issued (Anderson, pers. comm.)

USSR

Barzdo and Caldwell (1982) report 2000 killed in the Okhotsk Sea in 1980 and some 3000 to 4000 a year killed in the Bering Sea. It has not been possible to up-date these figures but it is unlikely that the skins leave the USSR.

Markets

The skins are likely to be used for the same sort of product as Ringed Seal, i.e. mainly for shoes, although it has not been possible to verify this.

There is no indication that the previously low level of international trade has changed in the last two or three years. If any changes have occurred, it is likely, in the current economic climate and given the reduced marketability of all sealskin, that trade in skins of Common Seal has declined.

Grey Seal
Halichoerus grypus

The Grey Seal occurs on both sides of the north Atlantic (King, 1983) but the species does not appear to be systematically traded internationally. FAO statistics (Anon, 1983c) report 1659 killed in the UK in 1980, 1466 in 1981 and 1407 in 1982. Norwegian Customs statistics record the imports of 2502 skins originating in the UK in 1983 and it is possible that these are from Grey Seals taken from British stocks.

Small quantities of Grey Seal skins may also enter trade from Canada where this species is still shot. The availability of Grey Seals to the commercial market seems to be largely a result of occasional killing operations which are intended to control rather than exploit populations.

Markets

No trade data referring specifically to this species are available. However it is certainly not of commercial significance in Europe.

Harp Seal
Phoca groenlandica

Source Countries

Harp Seals occur on the coasts of Canada, Greenland, Iceland, Norway and the northern USSR (King, 1983). The species has been systematically exploited for commercial purposes, especially by sealers from Canada, Norway and the USSR.

TABLE 4
Quotas for Harp Seal Kill in North West Atlantic

Year	Total allowable catch*	Allocation to Norway
1980	180000	20000
1981	183000	22500
1982	186000	24000
1983	186000	

* Includes allocations to Arctic natives and Greenland

Source: Anon (undated), Government of Canada.

Canada

The Harp Seal is the most heavily exploited seal in Canada. There is an annual spring kill in which for many years both Canadian and Norwegian sealers have participated (see Tables 4 and 5). The main targets are whitecoats and beaters, but bedlamers (Harp Seals over one year old but without 'harp' marking) and adults are also taken.

The killing has been the focus of widespread publicity generated by anti-sealing campaigns which in recent years have resulted in greatly reduced sealing catches.

TABLE 5
Take of Harp Seal in Canadian Waters
(Regulated Kill)

Year	Taken by Canada	Taken by Norway	Total
1980 (c)	148381 (a)	20213	168594 (a)
1981 (c)	166919	22382	189301
1982 (d)	142501	24238	166739
1983 (e)	57889	0 (b)	48457
1984 (f)	c.20000 (b)	0 (b)	c.20000 (b)

(a) NAFOSCS Doc. 80/XI/33, this figure in error due to double counting - about 6000 too high (Barzdo, 1983). (b) No Norwegian boat participated in Canadian Harp Seal hunt. (c) NAFOSCS Doc. 80/XI/33 cited in Barzdo and Caldwell, 1982. (d) Lavigne, 1983. (e) NAFOSCS Doc. 84/VI/7 preliminary. (f) C. Rieber, pers. comm.

Source: Northwest Atlantic Fisheries Organisation; Lavigne, 1983.

In 1983, a much reduced number of Harp Seals were killed. The reduction is most apparent in the figures for whitecoat which state that 10 254 were killed compared with 151 161 in 1981. There has also been a decline in the market availability of beaters, bedlamers and adult Harp Seal which is reflected in the Customs data. Canadian export figures show a sudden drop from 1981 to 1982 and a further drop in 1983 (Fig. 2).

Norway

Norwegian sealers operate in Canadian, Norwegian and Soviet waters. Skins taken in operations from Norwegian boats are brought back to Norway to be dressed.

Norwegian sealing enterprises have been severely damaged by a combination of factors - recessive economy, strong anti-sealing feelings resulting in bad

publicity, and poor weather during the killing. The decline in the industry is illustrated clearly by the results of recent Norwegian seal kills. In 1983 no Norwegian boat operated off Newfoundland despite a consistent take of around 22 000 in previous years. In 1984 the Norwegian Government subsidised the nine sealing boats which are still operable; three of these were paid to remain in port and again no Norwegian boat participated in the Canadian kill (Pedersen, pers. comm.). Exact figures of Harp Seal taken in 1984 in the West Ice and East Ice are not yet available but provisional data indicate that a further decline, of about 46%, from 1983 has occurred.

TABLE 6
Norwegian Take of Harp Seals

Year	N'land	W. Ice (a)	E. Ice (b)	Total
1980	20213	9874	15202	45289
1981	22382	11782	17465	51629
1982	24238	9692	17456	51386
1983	0	3318	18089	21407
1984	0	2500 (c)	c.9000 (c)	c. 1500

(a) West Ice - Jan Mayen area
(b) East Ice - Barents Sea
(c) C. Rieber, pers. comm.

Source: Pedersen, in litt.

USSR

The number of Harp Seal skins available to the European trade originating from Soviet stocks, other than those taken in Norwegian operations is known only from the auction results of Soyuzpushnina, the Soviet State fur agency (Fig. 3).

Soyuzpushnina also auctions skins of Harp, Hooded, Ringed and fur seals sent from Norway.

The absence of results means that the offered skins did not "go under the hammer". The quantities published as 'offered' may not arrive at the actual auction for any number of reasons, not the least of which is lack of buying interest (Billings, pers. comm.).

Markets

Despite fluctuations in demand and profits, international markets for Harp Seal products were well established until the early 1980s. Canadian Customs statistics record the bulk of sealskin exports as destined for Norway - accounting for 63 836 out of 65 629 skins exported in 1983. These are likely to be mostly of Harp Seal. Skins from Greenland go first to Denmark for auction by the RGTD. Norway and the USSR supply Harp Seal skins to countries throughout Europe but especially to outlets in F.R. Germany, France, the UK and Scandinavia.

Both adults and young are taken and the products of all age groups have entered international trade in the past. However, the most commercially viable products come from young animals: whitecoats and beaters. Whitecoats provide both fur and leather. The fur although soft, is not durable and is best suited for trimmings or for garments which will not be expected to withstand heavy wear (Thorer, pers. comm.). The leather is soft but long-lasting and is sold as 'pinseal'. In 1980 whitecoat skins sold for about US$25.00 and until 1981 there was a strong enough market in whitecoat skins to support specialised furriers particularly in the UK, France and F.R. Germany (Frayling, pers. comm.).

The thick, soft fur of beaters can be used in the manufacture of either clothes or shoes. It is often left undyed so that the natural colour is clearly visible.

Bedlamers produce a skin that is increasingly tough as the age of the individual increases. The colouration is mottled, lacking both the distinctive harp markings of adults and the softer spots of younger animals. Usually, therefore, these skins are dyed (Monson, pers. comm.) and are used for trimmings, particularly by the shoe industry, in the making of boots and sportswear.

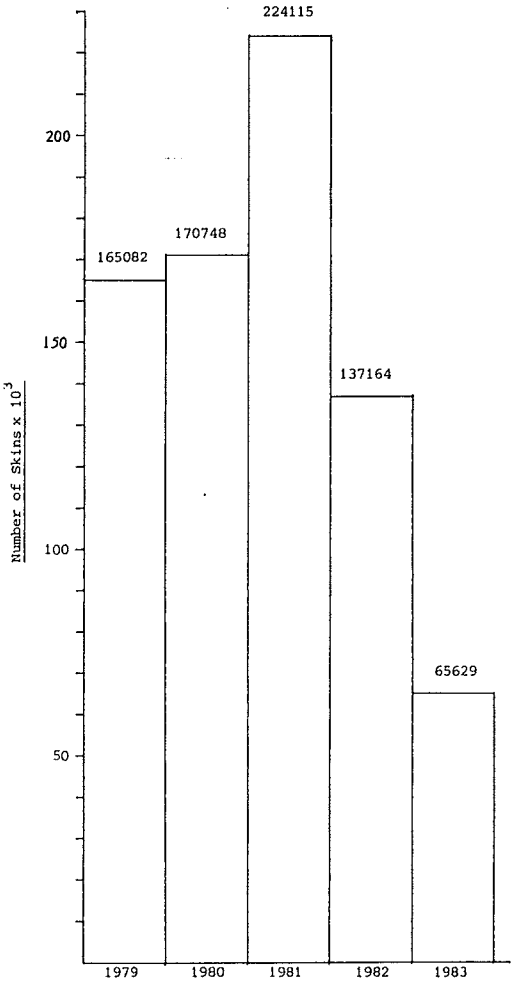
Adults yield a tough and usually scarred pelt which produces either an undistinguished leather or a stiff heavy fur that is of very limited appeal. When the take of adults was largely an extension of the take of offspring, this poor commercial quality was offset by the cheapness of the adult skins and the ready supply. However, in today's market, the skins of adult Harp Seals are of extremely limited value and saleability (Rieber, pers. comm.).

From the European Customs statistics of sealskins from all Harp Seal suppliers, it is impossible to identify exactly how many of which species were involved, except to some extent for Norway. However, it is worth noting that the imports of seal do not appear to have radically increased in anticipation of the EEC ban nor have the imports of non-EEC countries apparently increased in compensation.

Finland

Customs statistics for Finland show a sudden decline in raw sealskins imported, from over 30 000 in 1982 to about 300 in 1983. The species is not indicated, but from 1979 to 1981 the bulk of Finnish imports was from Canada, the only other source being Norway. In 1982, 14 000 skins came from Canada and 16 000 from Norway. In 1983 all the skins were from Greenland.

Fig. 2
Canadian exports of sealskins



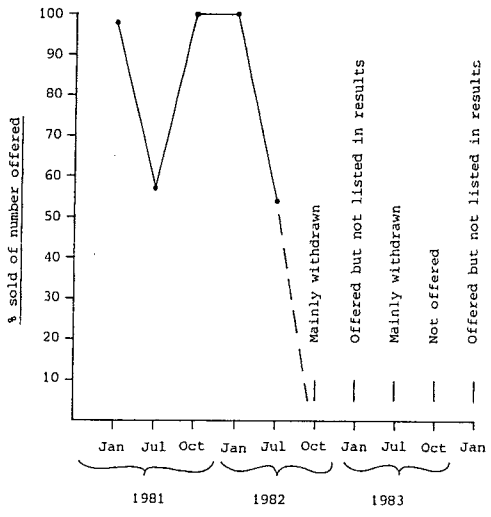
Norway

Skins taken by Norwegian sealers are generally dressed in Norway and may then be used in the manufacture of products in Norway, or exported, generally within Europe, the bulk going to F.R. Germany, France and Denmark. In 1984 G.C. Rieber & Co. A/S, the major purchaser of sealskins in Norway, offered to buy 60 000 Harp Seal skins from the Canadian kill. However, only about 20 000 Harp Seals were killed (Rieber, pers. comm.). The take by the Norwegian ships operating in the East and West Ice areas will not make up the quantity sought, as can be seen from the provisional data currently available for 1984 (Table 6).

Norwegian Customs statistics are unusually detailed in their inclusion of specific categories for raw skins of whitecoats and bluebacks. Imports of whitecoats added to catch figures give a number of skins available to the Norwegian market in a year (Fig. 4). However this does not account for stocks held from previous years. In addition some whitecoats may be misclassified in the Customs statistics under 'other seals'.

Customs data are not yet available for 1984 but as catch statistics are apparently half those of 1983 and as the Canadian sealers are expected to have killed 20 000 beaters only, it is probably safe to assume that there will be a further drop in the level of Norwegian trade in whitecoats and probably in the level of all trade in Harp Seal skins.

Fig. 3
Whitecoats offered at Soyuzpushnina auctions (Dressed, Russian)



1981 Jan 14000
Jul 15000
Oct 7000
1982 Jan 16000
Jul 15000
Oct 15000

1983 Jan 19000
Jul 20000
Oct None offered
1984 Jan 13000

Source: Fur Review, J. Billings

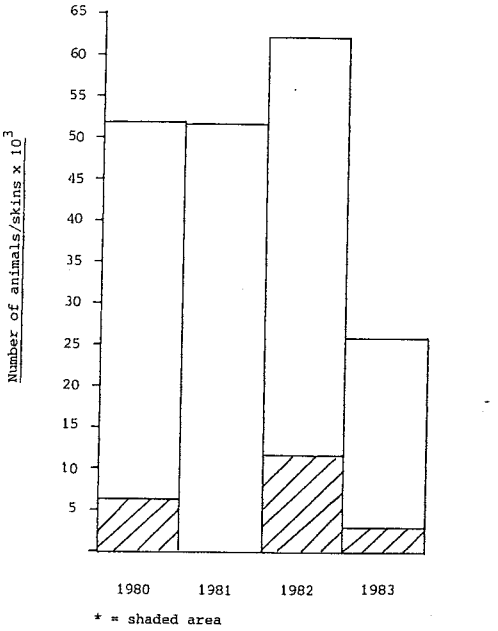
United Kingdom

Although the UK used to be the destination of considerable quantities of whitecoat, the implementation of the EEC ban made this illegal.

The EEC ban does not apply to skins of older Harp Seal and small quantities are being used by the leather industry. S.O. Rowe still tans Harp Seal skins - approximately 500 in 1983 and probably roughly the same in 1984, all bought from Rieber (Whipps, pers. comm.). The demand for this leather is extremely limited and its production is only undertaken as a sideline.

Although Whipps expressed no knowledge of any tanning firms other than S.O. Rowe still dealing in Harp Seal, according to one correspondent, two others, R. & A. Kohnstamm Ltd. and Bevingtons & Sons Ltd., both process

Fig. 4
Norwegian imports* of whitecoat and take of whitecoats from Newfoundland, West Ice and East Ice



* = shaded area

small amounts of seal leather which is in all likelihood from Harp Seal. Unfortunately, these firms did not respond to requests for information.

According to many members of the fur industry it is no longer financially viable to import Harp Seal skins (Frayling, pers. comm.). Hudson's Bay and Annings, which has close connections with Hudson's Bay in Toronto, feels that the financial returns on Harp Seal are now too limited to justify the expenditure of time and storage space necessary to dispose of the skins. Harp Seal skins used to bring £13 - £32 (approx. US$31-76) each in 1980 (Liney, pers. comm.). Now £7.50 (approx. US$9.75) is the average and at 10% commission it no longer is worthwhile (Dwan, pers. comm.).

The poor demand for older Harp Seal skins and the elimination of whitecoats in European trade has led to a greatly reduced volume of British trade in the species. This is reflected in the statistics of Canadian sealskin exports to the UK: nearly 23 000 in 1980, over 19 000 in 1981, nearly 16 000 in 1982 and 1025 in 1983.

France

Whitecoat pelts were used quite extensively by the French fur industry in clothes manufacture until about 1980/81. However the EEC import ban has eliminated this market outlet and it appears that France is no longer importing any significant quantities of Harp Seal.

F.R. Germany

Similarly, F.R. Germany no longer imports whitecoat although previously it was one of the main importers. Although beaters are not included in the EEC import ban, according to members of the German fur industry, the publicity surrounding the killing of Harp Seals and the proposal for the ban have effectively resulted in the elimination from garment manufacturing of beaters as well.

Beaters' and bedlamers' skins are still used, although to a very limited degree, by the shoe industry for trimmings. GEFU, for instance, uses beater to trim boots which are intended to sell in Asian markets (Laforce, pers. comm.) as the market in Germany for seal products is so poor.

Although it is impossible to identify the skins of each species in the German Customs statistics, it is worth noting that German imports of raw and dressed sealskins plunged in the year 1983, particularly imports from Norway and Canada which would be the principal suppliers of Harp Seal. From Canada the decline was from nearly 19 000 raw skins in 1982 to 8000 in 1983, although Canada's records of exports to Germany are 563 and 0 skins, respectively. Raw skins imported from Norway fell from nearly 6000 in 1982 to almost none in 1983 and dressed skins from 54 000 to 24 000.

Hooded Seal
Cystophora cristata

Hooded Seals occur off the coasts of Canada, Greenland, Iceland and Norway (Jan Mayen and Svalbard), rarely in the USSR (King, 1983). The species has been subject to widespread exploitation due to its habit of congregating in breeding and moulting areas. However exploitation has never reached levels equal to those imposed upon Harp Seal.

Bluebacks have, in recent years, been the principal Hooded Seal product in international trade. These pelts have been especially prized by the fur industry and commanded a relatively high price, around CA$40 each in 1979 (Barzdo, 1980). The skins of bluebacks have generally been used almost entirely for clothes. Adult pelts are frequently extremely scarred and so are of limited sale value.

Source Countries

Canada

Hooded Seals are taken in Canadian waters by both Canadian and Norwegian sealers. Table 8 gives quotas and numbers taken.

Greenland

Hooded Seals are taken in Greenland but only incidentally. According to the RGTD brochure 'Sealing in Greenland', "the seals which are taken are adult". Yet the RGTD has regularly offered blueback for sale at its auctions.

A large percentage of Hooded Seal skins appears to remain in Greenland but those which are exported are sold through the RGTD (see Table 9).

Norway

Hooded Seals, bluebacks, as well as older individuals, are taken by Norwegian operations in Newfoundland (in Table 8) and in the West Ice (Jan Mayen area) (see Table 10).

Markets

Up to 1983 nearly all of the Hooded Seal skins taken in Canadian waters were exported, mainly to Norway but also to the UK and F.R. Germany (Barzdo, 1983). However with the imposition of the EEC ban on imports of blueback skins, in October 1983, this trade has almost completely dried up. Similarly the RGTD sales have decreased considerably, a trend that is indicated by the greatly reduced quantities of Hooded Seal offered at their auctions; 691 in May 1984 compared with 1270 in May 1983.

The disappearance of a viable market is reflected in the greatly reduced take in 1983, although poor weather may have been partially responsible.

Both Canada and Norway strictly limit the number of females that can be taken, so most adult skins are from males and are likely therefore to be scarred. The extremely small takes recorded by Canada and Norway may be interpreted to indicate that there is very little demand for adult Hooded Seals.

In summary there is no market for Hooded Seal within the European Community and there is no indication of a developing demand in European non-Community countries.

TABLE 8
Take of Hooded Seals in the N.W. Atlantic by Norwegian and Canadian Sealing Operations

Year	Quota	Take
1980	15000	13116a
1981	15000	13686a
1982	15000	10393b
1983	12000	128c
1984	12000b	?

Source: a) NAFO Statistical Bulletin vol. 29, 1981; NAFO Statistical Bulletin vol. 30 NAFO SCS Doc. 80/x1/28 Provisional, 1981; b) Department of Fisheries and Oceans Canada, 1983; c) NAFOSCS Doc. 84/VI/7 (preliminary).

TABLE 9
Hooded Seals in Greenland

Year	Take*	Sales by RGTD
1980	4854	2383a
1981	4393	2461a
1982	4850	n/a
1983		2253b
1984		691c (up to May)

n/a: not available.
Source: a) Barzdo, 1983; b) Furu, in litt.; c) Fur Review, June 1984; * Anon, 1983c.

TABLE 10
Norwegian Take of Hooded Seals

	Bluebacks	1 year +	Total
1980a	8391	1358	9749
1981a	10569	1169	11738
1982b	11069	2394	13463
1983b	0	86	86

Source: a) Barzdo, 1983; b) Pedersen, in litt.

TRADE SUMMARY - BY COUNTRY

Europe has played a significant role in the world trade in seal products. Norway is one of the world's leading suppliers (along with Canada, the USA and the USSR) and the principal buyers of sealskins are also European countries - F.R. Germany, Denmark, France and Italy. These countries are an outlet for skins originating from Latin America and southern Africa as well as from throughout the northern hemisphere. The state of the European market is therefore of critical importance to the world trade in sealskins.

Austria

A few hundred sealskins, mostly dressed, have been exported to Austria each year from a variety of European countries. Austria's own Customs statistics are not sufficiently detailed for analysis. This country certainly plays no important role in Europe's sealskin trade although it is a consumer of sealskin garments.

Belgium/Luxembourg

The quantities of raw and dressed sealskins imported by Belgium and Luxembourg are very small, for example less than 200 skins in 1983. Over 95% of the total imports reported appear to remain within the country, presumably for manufacture of consumer products. It is not known whether these products are then exported.

Denmark

The strong Danish tradition of utilisation of seals has resulted in a continued local market for sealskins. However, this market is greatly reduced from previous levels. The reduced demand is reflected in Danish Customs import statistics and by the difficulties encountered by the RGTD in disposing of the Greenland skins at a high enough price (see above).

The raw sealskins imported come almost exclusively from Greenland and are down from 110 000 in 1979 to around 56 000 in 1982. All the evidence indicates that they are re-exported mostly back to Greenland and to Norway and Sweden.

Most dressed skins imported are used by the Danish fur industry and it does not appear that any Danish shoe manufacturer specialises in seal products. Within the fur industry, most of the business involving seals appears to be concentrated amongst a handful of firms, all of whom have experienced a serious reduction in the volume of their sealskin trade (Schöttlander, pers. comm.). M. Levinsky, for instance, says that over 20% of its annual turnover used to be in sealskins, now they account for less than 5%. S. Levitan has stopped trading in all sealskins except those of Ringed Seal.

About 40% of the dressed sealskins imported into Denmark are resold domestically by the importers, primarily made-up into products or as skins to garment manufacturers. Between 40 and 50% of the imported skins are exported mainly as garments, to F.R. Germany. Most of the remainder go to Norway or Austria (although the latter is viewed as an increasingly poor market), and small quantities of skins go to France and Greece.

Finland

Finnish Customs statistics indicate a decline in imports of processed sealskins from 9160 in 1980 to 1896 in 1983, and from over 30 000 raw skins a year between 1980 and 1982 to a mere 344 in 1983. The reason for the previous large imports was the existence of a tannery which specialised in sealskins. It is presumed that the tannery has had to diversify its interests.

France

Unfortunately, no French Customs data later than 1982 had been published at the time of this study, and the figures obtained for 1983 from the State Secretariat quote quantities only in 100kg weights which it is impossible to convert into numbers of skins. It is also impossible to identify the species involved except by extrapolation. No response to requests for information was received from any member of the French fur or shoe industries.

According to the Conseil National de Cuir, no French tannery processes sealskin (Boutevillain, in litt.) but the fur industry's demand for sealskin was sufficient to make France one of the main importers of processed skins in Europe during the late 1970s and early 1980s. However, French statistics show a precipitous decline in imports of dressed sealskins from 1982 to 1983, by 49% to about fifteen tonnes. Raw sealskin imports fell by 21% to about seventeen tonnes (data from Secretariat d'Etat, Chargé de l'Environnement).

F.R. Germany

Fur seal skins are still entering F.R. Germany from South Africa and North America. However, German furriers say they are extremely reluctant to buy even fur seal pelts because of the great difficulty in selling them. Fur seal coats made three years ago are still unsold because of a lack of consumer interest (Thorer, pers. comm.; Laforce, pers. comm.).

Denhardt-Seal used to be the major German buyer of hair seals with roughly 70% of the German market (Rieber, pers. comm.) but now buys none (Denhardt, pers. comm.). When anti-sealing pressures first came to bear, Denhardt-Seal had been willing to undertake not to buy either whitecoat or blueback, in the hope that this would ease the pressures and enable continued dealing in Ringed Seal. However, this policy proved futile.

Fur Seal pups (Arctocephalus) © J.R. Caldwell

The EEC ban on imports of whitecoats and bluebacks did not take effect until October 1983 and as Customs data are not yet available for the period since then, it remains to be seen what the full effect will be. According to members of the fur industry, very few sealskins of any species are being imported as few furriers feel they are financially worthwhile. However German Customs data indicate that raw sealskin imports have risen from 55 000 in 1979 to 70 000 in 1983. By contrast, imports of dressed sealskins have fallen dramatically from 108 000 to 34 000 in the same period.

The German sealskin shoe industry has experienced a decline that has led to either the bankruptcy or the diversification of specialised seal boot manufacturing companies. G.C.Rieber & Co. A/S, a major supplier to Germany used to sell around 60 000 skins a year to German shoe manufacturers in the early 1980s; now it sells around 20 000 (Rieber, pers. comm.). It should be stated, though, that the response to requests for information from German shoe manufacturers was universally poor.

Italy

Italian Customs statistics indicate that most sealskins imported are dressed and there are very few exports. This reflects both the absence of appropriate processing facilities within Italy and the demands of Italy's extensive fashion industry.

Up to 1982, Italian import statistics for dressed skins show the same trends in annual volume as the French. However, whereas in 1983 the French imports of dressed sealskins decreased sharply (Fig. 5), Italy's imports of dressed sealskins increased by ten tonnes (Fig. 6). According to the Ministry of Trade in Rome, this may be

Fig. 6
Italian imports of dressed sealskins (in 00kgs)

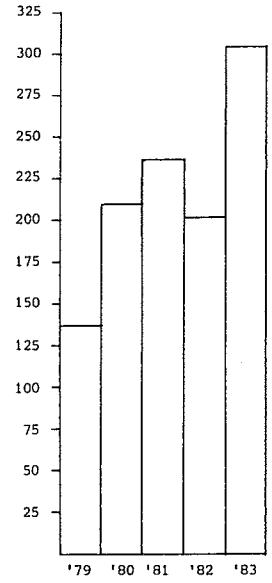
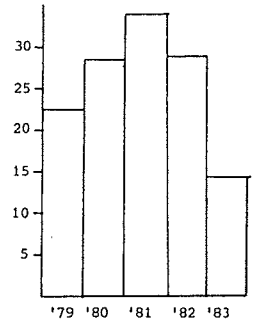


Fig. 5
French imports of dressed sealskins (in tonnes)



a reflection of stock-piling prior to the implementation of the EEC ban (Caprioli, pers. comm.). But the Ministry expressed surprise at the volume indicated by the Customs data. In their opinion the Italian market was greatly reduced as a result of the adverse publicity surrounding the sealing, the Italian ban on all imports of Harp Seal (regardless of age), the EEC ban on whitecoats and bluebacks and the poor economic state of the fur industry.

According to the Chairman of the Italian Fur Traders Association, sealskins of any species have only very limited commercial viability in Italy now and the trade is greatly reduced as a consequence (Zanini, pers. comm.).

Regarding the Italian shoe industry, it is possible that sealskins from Ringed Seal for example are still being used in the manufacture of boots especially après-ski boots. However all approaches to possible sources of information have proved fruitless.

Norway

In the past two years, Norway has experienced a reduction of 60-70% in the sales of seal products (Rieber, pers. comm.), a decrease which is reflected in the sales of G.C. Rieber & Co. A/S. This firm is the only general buyer of sealskins still in business in Norway and also operates its own sealing ship. Previously Rieber operated two sealskin processing plants, one which dressed skins for clothes, the other for shoes. In 1983 the clothes plant was closed and Rieber has now consolidated all seal dressing into one enterprise. Most skins from Norwegian sealing operations are now used largely by the shoe manufacturing industry to produce slippers, shoes and boots. According to Rieber, the market for seal leather is not reliable and it is only possible to sell off small quantities of skins for this purpose; he does not expect this situation to change for the next four or five years. He has a stockpile of over 200 000 sealskins of all species which he holds in the belief that eventually the current movement away from using seal products will reverse.

Norwegian exports of raw skins have declined dramatically (see Fig. 7).

Spain

Spanish Customs statistics include sealskins in the same category as 'Nutria Marina' which is believed to refer to the Marine Otter (Lutra felina). However, commercial international trade in the latter species is banned under CITES so most of the skins recorded are likely to be seal. No Spanish Customs statistics for years later than 1981 were available at the time of writing and no response was received from any Spanish fur dealers.

The Spanish furriers exhibiting at the Frankfurt Fur Fair in April, 1984 appeared to be using fur seal skins quite prominently but it was impossible to identify the species involved. Furthermore, these furriers were extremely unwilling to supply information. However, this may have been more a response to pressures of time than to a lack of co-operation.

Spain is not yet a member of the EEC and therefore the ban on imports of whitecoats and bluebacks does not apply.

Switzerland

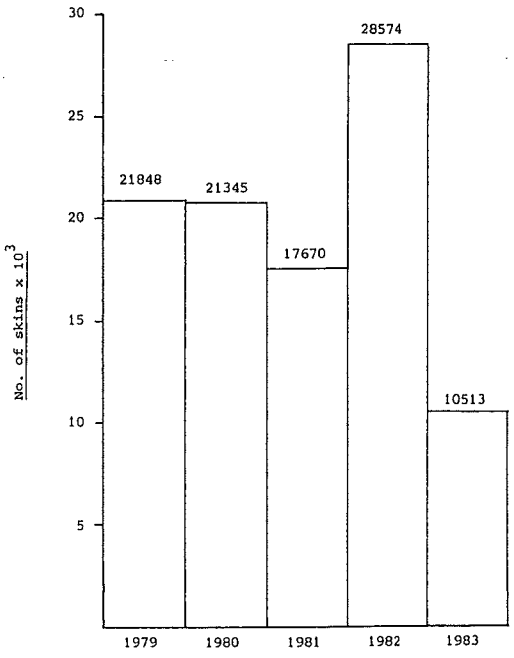
Although not a member of the EEC, Switzerland has experienced the same reduced marketability of sealskins. Swiss furriers still deal in small quantities of fur seal skins. Both Norway and F.R. Germany report exports of a few thousand sealskins to Switzerland over the past few years.

United Kingdom

With the EEC ban on whitecoats and the generally poor commercial value of seal products, the UK is no longer a major importer of sealskins. A few British furriers, such as I.M. Kahn, still advertise sealskins but by and large there is little interest (Frayling, pers. comm.). Hudson's Bay and Annings, once a major outlet in the UK, no longer considers sealskins worth handling (Dwan, pers. comm.).

A few leather tanners still import a few hundred sealskins between them.

Fig. 7
Norwegian exports of raw sealskins including whitecoats and bluebacks



DISCUSSION

The patterns and volumes of the European trade in sealskins have altered dramatically since 1981. Both the market value and the popular appeal of sealskin products, regardless of species, have deteriorated as a result of a combination of influences which have applied throughout the sealskin market.

The fluctuations of fashion trends are notorious. Tastes vary yearly and seal furs for clothing have been "out" for several years. Seal garments are very heavy with relatively short hair and the popular demand in furs is currently for more long-haired and/or light-weight pelts such as lynx and fox. Despite their incidental use in the fur industry, most furriers interviewed feel that seal coats are unlikely to be popular with the consumer for several years to come.

The manufacture of footwear has become the main outlet for sales of hair seal skins. This is probably the only thing that has kept the hair seal market alive.

Anti-sealing campaigns have been primarily aimed at stopping the killing of Harp and Hooded Seal pups - whitecoats and bluebacks. The campaigns have been extremely effective and resulted in a ban on the imports of these animals' skins in the EEC, from October 1983. As the EEC states have always provided the principal markets for these products, the ban has resulted in their virtual disappearance from international trade, for the time being.

In addition, the publicity and emotiveness stemming from these campaigns have created an atmosphere in which the public largely rejects sealskins of all species. The average buyer of a fur coat will not distinguish between Harp, Hooded or Cape Fur Seal. It is simply seal and therefore unacceptable.

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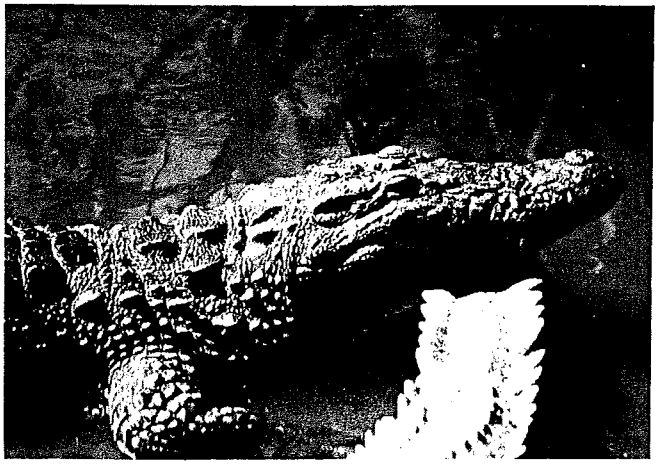
Wildlife Farming and Ranching Survey

by Richard Luxmoore

WTMU has now completed its preliminary survey of wildlife farming and ranching operations (see Traffic Bulletin IV(6):81). Information has been collected on all types of commercial farming of wild mammals, reptiles, amphibians and birds worldwide, and this is now to be prepared for publication.

The first publication, scheduled for early 1985, will cover the farming of crocodilians and will be in the nature of a directory. Crocodile farms exist, or have been proposed, in at least 38 countries, and 21 different species are bred. The most extensive farms occur in the USA (Alligator mississippiensis), Papua New Guinea, the Philippines, Singapore, Malaysia and Indonesia (Crocodylus novaeguineae and C. porosus), Zimbabwe and South Africa (Crocodylus niloticus), Thailand (Crocodylus siamensis and C. porosus), Australia (Crocodylus johnsoni and C. porosus) and Taiwan (Caiman crocodilus). The directory will list all available details of the farms, including the numbers of each species kept and estimates of production.



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The second publication will cover mammal farming. It will be divided into sections to cater for the diverse nature of the farms. Deer farming forms a major part, and is undertaken in at least 29 countries with 20 different species of deer. Apart from Reindeer (Rangifer tarandus), which are arguably domesticated, the major species are Red Deer (Cervus elaphus), Fallow Deer (Cervus dama) and Sika Deer (Cervus nippon)

Another major section details the farming of large mammals in Africa. This has attracted much theoretical discussion in the past but few of the experimental farms in East Africa have prospered. The most extensive development has been in South Africa where commercial game utilisation is now practised on some 5000-10 000 private farms. This expansion has been accompanied by a general increase in game populations and the extent to which similar farming, if encouraged in other African countries, would benefit their game species, is discussed.

Other mammal farming ventures included are fur farming, the breeding of primates for biomedical research, and numerous diverse breeding operations from Cane Rats to elephants.

The remainder of the material covered by the survey, essentially incorporating birds, amphibians and reptiles other than crocodilians, is not to be published for the time being until further information has been collected.

It should be emphasised that although the initial phase of the survey is now complete, information on wildlife farming will continue to be collected by WTMU to keep the database up-to-date.

Egg Thief Evades Fine

A West German egg thief has made his escape from Iceland while awaiting trial in Reykjavik. In May, Miroslav Peter Baly and his wife were convicted of stealing eggs of the Gyr Falcon (Falco rusticolus), a protected species listed on CITES Appendix I. Eight eggs were found in their possession, together with maps of nesting sites and incubation equipment. They were fined a total of US$17 000 and the woman returned to Germany after payment of her fine of US$7000. Baly remained in Iceland pending an appeal but escaped by stowing away on a German cargo vessel, the Eliza Heeren, on 19 June. The ship called at Esbjerg in Denmark but the captain refused to hand Baly over to the police and landed him at Hamburg. There is thought to be little chance that the fine can be collected now although Baly already has a suspended sentence in Germany for stealing young falcons.

Source: News from Iceland, June/July 1984

Ecuador Bans Commercial Trade

From 1 January 1983 Ecuador no longer permits exports of specimens of wild fauna and flora for commercial purposes. Exports are only permitted for scientific and educational purposes and for international exchanges between scientific institutions, authorized by the Ministerio de Agricultura y Ganaderia.

The CITES Secretariat was informed of this in May 1984; the implementing legislation is Article 49 of the "Ley Forestal y de Conservación de Areas Naturales y Vida Silvestre", published in Ecuador's Official Register of 24 August 1981. In notifying the Parties (CITES Notification No. 306 of 28 August 1984), the Secretariat points out that shipments for purposes other than those specified, on export documents dated after 1 January 1983, are illegal and should be refused or seized.

This information supersedes that published in Bulletin III(3/4):31, which should now be disregarded.

Dr Federico Medem

Dr Federico Medem died in Bogotá, Colombia on 1 May 1984. Although he acquired his doctorate for work on marine molluscs in Naples in 1942, he will be best remembered for his studies on the crocodilians of South America, to which he devoted the latter part of his life.

Born in Riga, Latvia in 1912, he attended the University of Humboldt in Berlin. After working at the Max Planck Institute for two years, he moved to the University of Berne in Switzerland and thence to Colombia in 1950 where he took up a post as Researcher in Zoology at the Roberto Franco Institute in Villavicencio. Dr Medem stayed in Colombia for the rest of his life, gaining citizenship in 1958. His posts included Head of the Faunistic section of the Corporación Autónoma Regional de los Valles del Magdalena, Director of the Roberto Franco Institute and Professor Titular de Dedicación Exclusiva of the Universidad Nacional.

In late life, he became increasingly concerned with crocodilian conservation. From 1972-73 he undertook a survey of the South American reptile hide industry and later attended numerous international conferences on conservation.

Of his eighty scientific publications, his recent two volume book "Los crocodylia de Sur America" must be seen as a tribute to his dedication to this subject. An English translation of one chapter of this book detailing the crocodilian skin trade in South America is to be published by TRAFFIC (USA) later this autumn.

Source: TRAFFIC (USA)

Butterflies Protected in Indonesia

In Bulletin III (6) we published a list of species protected in Indonesia. Three species of birdwing butterfly were missing from the list and we below publish the full list:

1. Species protected under Decree Ministry of Agriculture No. 576/Kpts/Um/8/1980.

Cethosia myrina
Ornithoptera chimaera - Chimaera Birdwing
O. goliath - Goliath Birdwing
O. paradisea - Paradise or Tailed Birdwing
Trogonoptera brookiana - Rajah Brooke's Birdwing
Troides amphrysus
T. andromache
T. criton
T. haliphron
T. helena - Common Birdwing
(incl. T. helena neoris)
T. hypolitus
T. miranda
T. plato
T. rhadamantus
T. riedeli

2. Species protected under Decree of Ministry of Agriculture No. 716/kpts/Um/10/1980

Ornithoptera priamus - Priam's Birdwing
O. rothschildi - Rothschild's Birdwing
O. tithonus

It is noteworthy that Troides rhadamantus is listed as protected although it occurs only in the Philippines, not in Indonesia. T. dohertyi occurs on the Talaud Islands of remotest northern Indonesia, but is not listed as protected. However, some authorities classify dohertyi as a subspecies of T. rhadamantus, and this is presumably the basis of the listing. D'Abrera in Birdwing Butterflies of the World (1975), (the classification used in the CITES listing) recognises the common ancestry of the two species but treats T. dohertyi as a full species.

It is also noteworthy that Troides andromache is not recorded as occurring in Indonesia, but on Borneo, only in Sabah and Sarawak, Malaysia. However, it is quite possible that this species occurs in Kalimantan.

Cactus '84 Sales Fair

A cactus sales fair was held in Harrogate, UK, on 25 August. Most of the plants on sale were artificially propagated but several nurseries were offering wild-collected specimens of rare cacti and other succulents.

Artificially propagated CITES Appendix I cacti and succulents are increasingly advertised for sale by UK nurseries. At the sales fair, seedlings of the slow growing Mexican cacti, Ariocarpus trigonus and A. scapharostrus were offered together with seed-raised plants of Leuchtenbergia principis and Mammillaria pectinifera. Propagated plants of Aloe polyphylla, an Appendix I succulent, endemic to Lesotho, were also on sale. No wild-collected Appendix I plants were on display by nurseries at the sales fair.

Wild-collected plants which were for sale included specimens of Ariocarpus kotschoubeyanus and both varieties of A. retusus, all of which are considered to be Vulnerable by IUCN. The same nursery offered wild-collected plants of all Ariocarpus spp. not currently listed on Appendix I of CITES.

Several species of Madagascan succulents collected from the wild were on sale. These were plants of the Didiereaceae, a family endemic to Madagascar, and listed on Appendix II of CITES.

Sara Oldfield

Illegal Collectors Face Penalties

More than thirty people in the USA and Canada face sentences of up to five years imprisonment and $20 000 fines for their part in the capture, transport and sale of more than 400 Peregrine Falcons (Falco peregrinus), Gyrfalcons (Falco rusticolus) and other birds of prey (The Washington Post, 30.6.84).

Many of the birds, which had been illegally collected from the wild over the last three years, had been channelled into breeding operations where they had been fraudulently ringed. Since the Reagan administration, the federal ban on the collection of raptors has been lifted for birds bred in captivity, provided that they are marked with government-authorized leg bands.

Smuggling techniques in these operations included using small aircraft to cross remote sections of the US-Canadian border in order to snatch chicks, and strapping illegally-taken eggs next to the body, in addition to trapping adult birds.

The birds can fetch as much as US$60 000 each in Europe and the Middle East.

Parrots and Primates Intercepted

A consignment from Senegal, which included a number of smuggled parrots and primates, was intercepted on 12 March 1984 at Frankfurt Airport whilst in transit to Italy. The shipment consisted of fifty parrots: Senegal Parrots (Poicephalus senegalus) and Ring-necked Parakeets (Psittacula krameri); and eight primates: five Patas Monkeys (Erythrocebus patas) and three which were probably Savanna Monkeys (Cercopithecus aethiops); all had been concealed in secret compartments. The shipment was covered by an export permit which recorded only non-CITES listed species. A permit for the listed species to be imported into Italy (required under EEC Regulation 3626/82) had not been issued. The consignment, however, was forwarded to Italy on 13 March and we do not yet know whether Italy accepted it.

Source: CITES Secretariat

Macaw Rehabilitation Project

The World Wildlife Fund has agreed to fund the completion of the project to rehabilitate a number of macaws at Buenavista, near Amboro, Bolivia (see Bulletin VI(2):15).

Some sixty-six macaws have now been released, along with the nineteen monkeys which had been temporarily housed at Santa Cruz Zoo. However some 247 macaws are still recovering and it is not yet known how long it will take before they can be released.

The approximate numbers of remaining birds are: 4 Blue-fronted Amazons (Amazona aestiva), 4 Tucuman Amazons (Amazona tucumana), 149 Blue-and-Yellow Macaws (Ara ararauna), 41 Yellow-collared Macaws (Ara auricollis), 11 Green-winged Macaws (Ara chloroptera), 8 Scarlet Macaws (Ara macao), 12 Military Macaws (Ara militaris), 17 Chestnut-fronted Macaws (Ara severa), and 40 Blue-crowned (Sharp-tailed) Conures (Aratinga acuticaudata). The project has been in operation for ten weeks at a cost of US$3291.

The latest report on the birds being cared for in Robin Clarke's garage is that 90 parrots have been released, 49 have died and there are 13 new arrivals, leaving a total of 121 birds still on hand.

Source: Reginald Hardy, Bolivian Wildlife Society (Prodena Bolivia)

The Effects of Appendix I Reservations on the Trade of CITES Parties

by J.R. Caldwell

FRANCE

A CITES Party may make specific reservations with respect to species listed on the Appendices at the time of depositing its instrument of ratification, acceptance, approval or accession. Parties may also enter reservations on amendments to the CITES Appendices by notifying the Depositary Government, in writing, within 90 days of the meeting of the Parties at which the amendment was adopted. Until that reservation is withdrawn the Party is treated as a State not a Party to the Convention with respect to trade in the species concerned.

France has reservations on the Appendix I listing of seven species of reptile: Chelonia mydas (Green Turtle), Eretmochelys imbricata (Hawksbill Turtle), Melanosuchus niger (Black Caiman), Crocodylus cataphractus (African Slender-snouted Crocodile), C.niloticus (Nile Crocodile), C.porosus (Estuarine Crocodile) and Osteolaemus tetraspis (West African Dwarf Crocodile).

With the entry into force, on 1 January 1984, of EEC Regulation 3626/82, any existing reservations of EEC States are no longer valid because the regulation makes no provision for such non-compliance. However Guiana, Guadeloupe, Martinique, Réunion and St. Pierre and Miquelon are French overseas Departments (DoM), and New Caledonia and the Wallis and Futuna Islands are French overseas Territories (ToM), in which CITES applies. France's approval of CITES includes administration for both ToM and DoM but whereas the DoM are included in the EEC the ToM are not. Thus the reservations currently lodged with the Depositary Government still apply in the ToM and the French Administration cannot officially withdraw them without consulting the Management Authorities of the above Territories. France has never reported importing any products from Appendix I species on which it has a reservation but does report on the re-export trade. Other Parties, however, report both exports and re-exports to, and imports from France. These are the only data from which it is possible to estimate the extent of the trade.

RECENT TRADE:

Chelonia mydas

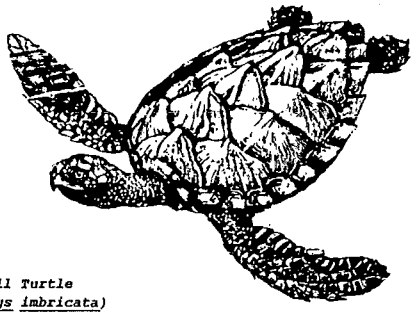
In 1981, Italy, which had a reservation on this species until 1 January 1984, reported re-exporting 9886 skins and 8306 leather items, including shoes and handbags, to France. The origin of over 50% (5416) of the skins was reported to be Ecuador and the remainder were from the non-Party states of Mexico and Honduras. In addition, F.R.Germany reported re-exporting to France 5kg of scales originating from Indonesia and 499kg of meat from the Cayman Islands. Italy reported importing, from France, 3809 skins that apparently originated from Mexico; this transaction was also reported by France. France also reported exports of 246 boxes of soup to Denmark, thirty-eight handbags to UK and thirty belts to Japan.

In 1982, Italy reported re-exports to France of 4982 skins (origin Ecuador) plus 5434 leather items and imports from France of 479 skins and 18 leather items. The UK reported exporting 600 cans of soup (origin Cayman Islands) to France.

The products from the Cayman Islands are believed by some authorities to be acceptable as 'captive-bred' and for this reason trade is permitted; however we do not intend to discuss that aspect here. Ecuador, F.R.Germany and Indonesia have never entered reservations on this species.

Eretmochelys imbricata

France does not appear to have had much trade in this species in recent years. The only records of trade with France are as follows: Italy reported exporting six handbags and 1811 pairs of shoes, origin Mexico, in 1981 and thirty-four pairs of shoes in 1982; Switzerland reported importing fifty-five items of shell in 1981; F.R. Germany reported exporting 1kg of shell in 1982; and USA seized two shells and three leather items. However F.R.Germany, Italy and Switzerland have never entered reservations on this species.



Hawksbill Turtle (Eretmochelys imbricata)

Crocodylus cataphractus

In 1981 France reported re-exporting 8121 skins to Italy, while Italy reported issuing permits to import 8146 skins from France. The origins of the skins were listed by France as being Congo (6509) and Gabon (1612), however Italy also listed Zaire as a source of 289 skins. Neither Gabon nor Congo were party to the Convention in 1981 and Italy had a reservation on this species. In that year Italy reported exporting ten skins and 253 leather items to France, Congo being the major origin reported.

In 1982 France reported re-exporting 7787 skins to Italy (which issued permits to import 8936) and ninety skins to Spain. France named the origins as Congo, Mali and Gabon but Italy again named Zaire as a source country. Italy also reported exports of 622 leather items to France, origins Congo, Gabon and Togo. Of the two Parties named as origins, neither Zaire nor Togo has entered a reservation on this species.

The 1983 annual report from Congo lists the export of 4870 skins to France. These skins may have been acquired before the Convention came into force in Congo (31 January 1983) but this information does suggest that substantial trade may be occurring.

Crocodylus niloticus

In 1981 Italy reported re-exporting to France 2977 skins, origin Nigeria and Sudan. Liberia reported exporting 230 skins to France and four to Madagascar. However, most of the 10 185 skins that France reports re-exporting were apparently imported directly from the producer countries. Most skins went to Italy, but small quantities went to Singapore, Spain, Switzerland and F.R.Germany. The main origins of the skins were given as Mali and Sudan, but Cameroon, Gabon, Togo and Nigeria were also significant; small numbers came from Congo and Zimbabwe.

The data for 1982 indicate a similar pattern, as the only Parties that reported sending skins to France were Togo (2817), Italy (1645), F.R.Germany (149) and Madagascar (15). However the French annual report records the re-export of 13 067 skins; 10 690 of these went to Italy and smaller quantities to F.R.Germany, Singapore and Austria. Italy reported issuing permits to import 19 497 skins from France. This apparent

discrepancy may mean that import permits were issued but not used. Alternatively there may have been one or more reporting problems. The terminology used to describe skins in trade can be confusing - they are either sold whole or with the dorsal portion discarded, or subdivided into pieces such as flanks, bellies and tails; moreover there is evidence to suggest that the terms 'skins', 'sides' and 'pieces' may be used interchangeably to some extent. Two 'skins' may in fact refer to flanks, and thus represent the skin of only one individual. Another possible explanation of numerical discrepancies is that goods exported at the end of one year may not arrive at their destination until the beginning of the next.

In 1982 France reported exporting 576 leather items including handbags and belts; these were mainly to Japan and Switzerland, with small numbers to F.R.Germany, Italy, Netherlands, Hong Kong and UK.

Of those countries reported to be involved in the trade, Austria, Cameroon, Congo, Gabon, Liberia, the Netherlands, Singapore, Spain and Sudan, were not Party to the Convention for all or part of the relevant year. Of the Party states, only France and Italy had entered reservations on C. niloticus.

Crocodylus porosus

With this species also, France has mainly imported the skins directly from the producer countries or through non-Party states. The only apparent import by France is 279 skins that were reported to be sent back there, by Switzerland. Analysis of the data is complicated by the Appendix II listing of the Papua New Guinea population of the species.

In 1981 France reported re-exporting 2504 skins to Austria, Switzerland, F.R.Germany and Italy, the origin of the skins being listed as Singapore. It is interesting to note that the 177 skins re-exported to F.R.Germany were also reported by Germany as an import, but their origin was listed as Papua New Guinea, thus Appendix II. In 1982 France reported 1377 skins re-exported to the same countries as in 1981 plus Japan, but their origin was largely unknown.

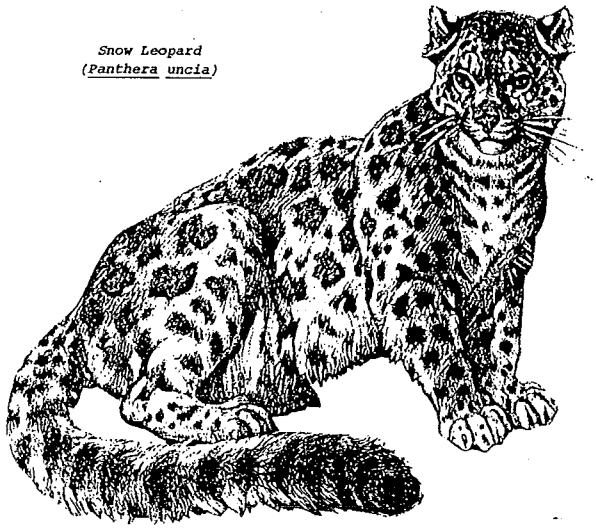
All the reported countries of destination of whole skins had reservations on the species, or were not party to the Convention at the time. This also applies to most of the exports of leather products.

Osteolaemus tetraspis

There are only two records of trade in this species that involve France. The French 1981 annual report lists the re-export of fifty-five skins to Spain (non-Party) and 218 to Italy (which had a reservation), and gives their origin as Mali. Italy did not report issuing a permit for the import.

CONCLUSIONS AND DISCUSSION

In order to protect its extensive leather industry France has reservations on seven species of reptile listed on Appendix I of CITES. These reservations have been effectively annulled by the implementation of EEC Regulation 3626/82, although they still apply to French overseas Territories. The Appendix I species traded by France in greatest numbers in recent years are C. cataphractus, C. niloticus and C. porosus, many of the skins being imported directly from the producer countries or as re-exports from non-Parties or from Parties holding reservations on these species. The bulk of the reported re-export trade in whole skins, and in worked products, appears also to have been largely with Parties holding similar reservations, or with non-Parties. Trade in Appendix I species by Party States without reservations does appear to have been continuing however, although it is not known whether the reported consignments were seized by the countries concerned.



Snow Leopard (Panthera uncia)

Prison for Snow Leopard Coat Dealers

A firm in New Delhi, India, has been fined Rs10 000 (approximately US$850) for being in possession of a Snow Leopard (Panthera uncia) skin coat. Two employees have been fined Rs5000 each and sentenced to one year imprisonment. The Snow Leopard is listed on CITES Appendix I.

The coat was discovered for sale in Connaught Place, New Delhi by Peter Jackson, Chairman of the IUCN Species Survival Commission Cat Specialist Group. After expressing interest in buying the coat, Jackson later returned with wildlife officials to seize the garment. In the ensuing scuffle, the coat disappeared and it was some time before officials were able to locate and seize it as evidence.

The case, which protracted for nine years, has resulted in the withdrawal of the firm's licence to trade in wildlife and the closure of its premises. The contents of the shop have been deposited with local dealers.

The garment appears to have been made from the skins of two adult cats. The Snow Leopard, which is becoming increasingly scarce, is found in the Himalayas and other high mountain ranges north to Afghanistan and the USSR and east from Pakistan through northern India, Nepal and Bhutan to Mongolia and China.

Source: Peter Jackson, IUCN/SSC Cat Specialist Group

Tanzania Bans Sale of Leopard Articles

On 5 July 1984, Tanzania imposed a ban on the sale of Leopard (Panthera pardus) skin articles to tourists. A complete ban on the sale of Leopard-derived articles to residents took effect from 1 August. These bans are an attempt to make the enforcement of the Convention easier with regard to controlling trade in an Appendix I species. However, as decided at the fourth meeting of the Conference of the Parties to CITES held in Botswana in April 1983, Tanzania may allow the export of sixty whole leopard skins in a calendar year because it is accepted that the species is not endangered in that country (see Traffic Bulletin V(2):17).

Source: Ministry of Natural Resources and Tourism, Tanzania

BOOK REVIEW

Rhino Exploitation

The Trade in Rhino Products in India, Indonesia, Malaysia, Burma, Japan and South Korea, *by Esmond Bradley Martin*

Reviewed by Richard Luxmoore

There is already enough myth and folklore surrounding the use of rhino products in Eastern countries. Consequently Esmond Bradley Martin's book on rhino exploitation is particularly useful as it documents carefully the type and extent of rhino product usage from India to Japan, shattering many commonly held misapprehensions.

The book presents the results of Martin's research in India, Indonesia, Malaysia, Burma, South Korea and Japan. Much of this involved interviews with dealers and practitioners of traditional medicine to build up a picture of product usage, sources, lines of supply and price fluctuations over the past few years. This was backed up by analysis of Customs statistics and other official sources of data. These results are all clearly tabulated at the end of each chapter, allowing easy reference.

Much of the information and pictures appear to have been extracted from Martin's earlier book "Run Rhino Run" but it should nevertheless prove interesting to those who have not had a chance to read this. His description of the use of different products, ranging from stomach contents to toenails and including hides, blood, meat, dung, urine and, of course, horn, is especially interesting. The Chinese are the main users of rhino horn, especially as a fever reducer, and it is their ex-patriot communities throughout south-east Asia which provide the best market. The horns of the Oriental species, Javan, Sumatran and Indian, fetch the highest prices as they are considered most effective; the African horns are much more available but are in less demand. Surprisingly, to Westerners at least, rhino horn is very rarely considered to be an aphrodisiac except for a few local traditions in India. More surprising still are the uses to which other products are put, and the book has a wealth of technical information on such topics as how to increase one's virility with leaves soaked in rhino urine, or where exactly to put a burning rhino horn to cure piles.

Throughout the book Martin takes care to point out the effect (or lack of it) of legal controls on rhino usage and poaching; and he discusses how membership of CITES should have a dramatic effect on the trade in Hong Kong and Japan since all species of rhino are on Appendix I. The final chapter, entitled "Halting the rhino horn trade", describes the apparent advances that have already been made, and suggests ways in which better control could be achieved. These include stricter controls on international trade, notably by persuading non-Party countries, such as Singapore, Korea and Brunei, to accede to CITES, promotion of the use of substitute medicaments such as Saiga horn and Water Buffalo hide, and public education on the need for rhino conservation.

The book is extensively illustrated with black and white photographs but it is a pity that there are so few taken in south-east Asia. Most seem to be from Nepal, Yemen and East Africa, areas which are barely mentioned in the text.

As well as being interesting reading, this book highlights the impact of exploitation on the surviving rhino populations. It makes a useful contribution to understanding the nature of the trade, thereby assisting in the urgent need to find ways of controlling it.

Rhino Exploitation is published by WWF Hong Kong and is available from their offices at 9/F, Wing On Life Building, 22 Des Voeux Road, Central, Hong Kong, for US$7.50 (including air mail postage) and US$6.50 (including surface mail postage).

Call for CITES Information

Two researchers, Laura H. Kosloff and Mark C. Trexler, are currently conducting a study of the implementation of CITES, to examine how well it is being implemented, why it is so successful (or isn't) and why it has developed as it has. They would be grateful for the following:

- copies of or references to any reports, memoranda, or papers discussing CITES issues, either in general or with respect to a particular country;
- information on the national legislation that implements CITES in party States, as well as information on each country's strengths and weaknesses in implementing CITES;
- organisations' and individuals' views on the Convention, practical problems with its implementation and regulations, the functioning of the Secretariat, the politics of the Convention and the politics of the process for amending the Appendices.

Both researchers are at the University of California; Laura Kosloff is writing a masters thesis on CITES, at the School of Law, Davis, and Mark Trexler is writing a doctoral dissertation on the relevance of legal instruments for conservation at the Graduate School of Public Policy, Berkeley. It is intended that the results of their research should be widely published. Both researchers may be contacted at 709 Adeline Place, Davis, California 95616, USA.

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The Bulletin is sent free to all WTMU/IUCN consultants, government agencies, conservation organisations and other institutions in a position to further the conservation of threatened species. Donations to defray costs will continue to be welcomed. To commercial enterprises and private individuals, the Bulletin subscription is US$14.00 (£7.00 in UK) per volume. (For orders of more than one copy, a reduced rate is available).

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