



WILDLIFE TRADE MONITORING UNIT

Traffic Bulletin

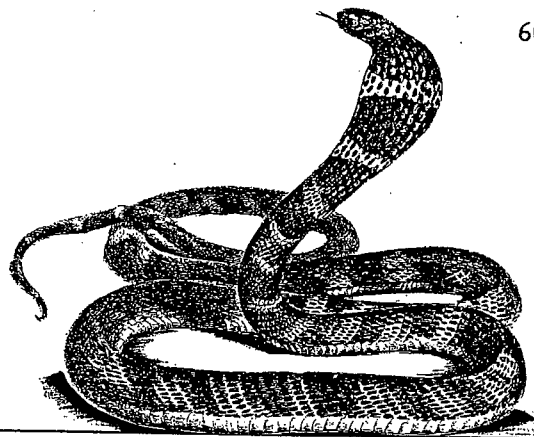
**Publication of the TRAFFIC Bulletin is funded by
THE PEOPLE'S TRUST FOR ENDANGERED SPECIES**

Date of Publication: 8 February 1984

ISSN 0144-0896

CONTENTS

	<u>Page</u>
85 Parties to CITES/Namibia Bans Wild Bird Exports Malaysia Bans Monkey Exports/More Bans in Sudan Trade Threatens Tamarins	51
THE REPTILE SKIN TRADE IN BANGLADESH by Jane Gilmour	52-58
EEC CITES Regulation/Giant Panda on Appendix I Exported Falconiformes to be Banded Indian Snakes on Appendix III Bird Shooting in Kenya	59
WORLD TRADE IN TEGU SKINS by Ginette Hemley	60-62
Caribbeans Urged to Join CITES Course for Pet Shop Owners	62
Sandalwood Smuggling in India Switzerland Seizes Monitors	63
Musk Farms in China Chimps in Japan Indiscriminate Slaughter of Sea-Lions Seal Fur-Dressing Plant to Close Fitz-Roya Trade to Increase?	64



VOL. V NOS. 5/6

Publication of the Traffic Bulletin is funded by the People's Trust for Endangered Species, 19 Quarry St., Guildford, Surrey, UK. Any opinions expressed in this Bulletin are those of the writers and do not necessarily reflect those of IUCN or any other organisation connected with WTMU. Information may be quoted freely, but an acknowledgement to WTMU/IUCN should be made where appropriate. The Editor would appreciate a copy of any reprinted material.

Published by the Wildlife Trade Monitoring Unit, IUCN Conservation Monitoring Centre, 219c Huntingdon Road, Cambridge, CB3 0DL, UK. Tel: Camb. 277427. Tlx: 817036. Compiled by Kim Lochen. Printed by Foister & Jagg Ltd., Abbey Walk, Cambridge.

85 Parties to CITES

Algeria acceded to CITES on 23 November 1983 (effective as of 21 February 1984), becoming the 83rd member country of CITES. Luxembourg, which ratified the Convention on 13 December 1983 (effective as of 12 March 1984), becomes the 84th Party to CITES. The Republic of Trinidad and Tobago acceded to CITES on 19 January 1984 (effective as of 18 April 1984), and becomes the 85th member country of CITES.

Namibia Bans Wild Bird Exports

The capture and export of wild birds has been banned in South-West Africa/Namibia.

A similar ban imposed in 1980, following recommendations by the Namibian Conservation Board, was revoked in 1982 when two dealers were given permits to continue exporting up to 40,000 wild birds annually each, until the end of 1983. With the ban re-imposed, the dealers are now required to breed their own stock for the export market.

During 1978-80, a total of 100,000 birds were exported from Namibia and during most of this 3-year period, only three dealers were supplying the market.

As well as the export ban, there are indications that Namibia is tightening controls on the imports of wild birds and anyone in possession of a cage-bird must have a licence. Limited imports of captive-bred birds will be allowed for aviary purposes and in cases where owners of captive-bred birds wish to emigrate to South Africa, export permits will be granted, provided that the owner is in legal possession and has had the bird(s) for more than 12 months.

Sources: *International Council for Bird Preservation.*
C.J.V. Rocher, Dept. of Agriculture & Nature Conservation, Namibia.

More Bans in Sudan

Following Sudan's national ban on the export of unworked ivory, the Department of Wildlife Force in the Equatorial Region of Sudan has gone one step further and withdrawn all 'souvenir licenses or rather hand-craft licenses' (sic). It has also ordered a prohibition on trade in all Felidae skins, Ostrich eggs and feathers as from 31 December 1983; no hunting licences in respect of these species will be issued.

Malaysia Bans Monkey Exports

From 15 June 1984, the exportation of monkeys from Malaysia will be banned.

Following India's ban in 1978 on exports of monkeys to the US, scientists have turned to Crab-eating macaques (*Macaca fascicularis*) from Malaysia, Indonesia and the Philippines to assist in the research into the effects of bio-chemical warfare and other military weapons and nuclear tests.

According to Wildlife Department figures, 10,585 macaques were exported from Malaysia in 1977 and 18,000 in 1978. The net export of *Macaca fascicularis* from Malaysia, recorded in the annual reports of CITES Parties, was at least 1763 animals in 1977, 3447 in 1978, 1090 in 1979, 4894 in 1980, 4091 in 1981 and 732 in 1982. With the news that the Ministry will not renew the 3-year approval for the export of monkeys, the Wildlife and

National Parks Department proposes to carry out a study on the population density and distribution of monkeys throughout Malaysia.

Source: *The Star (Kuala Lumpur) 8/12.12.83*

Trade Threatens Tamarins

Fifty or more Golden-headed lion tamarins, (*Leontopithecus rosalia chrysomelas* - CITES Appendix I) one of the world's most endangered mammals, seem to have been smuggled out of Brazil in 1983.

Twenty-nine animals were obtained by a Belgian wildlife dealer, René Corten, of Westerlo. They were imported to Belgium, via Bolivia, in two shipments with other primates, in October and November last year. Three of the animals soon died. It is thought that this transaction may have accounted for one-sixth or more of the entire wild population, which only occurs in a small area of rainforest in south-east Brazil. Yet Brazil has a ban on all exports of wild mammals and the Brazilian Government has officially confirmed to the CITES Secretariat that the exports were illegal. Furthermore, the CITES Secretariat has received a formal response from Bolivia stating that the company which exported the animals was neither registered nor approved as an exporter and that no CITES permits were issued. The shipment from Bolivia, therefore, was illegal.

Corten paid approximately US\$48.00 (£32.00) each for the tamarins and has offered them for sale at up to £3,600. A dealer in Southampton, Rex Merritt, acting as an agent for Corten, offered a pair of the animals for £2,000 to Jersey Zoo, whose Director knew that they could only have been obtained illegally. However, the importation took place before Belgium became a Party to CITES and no law appears to have been broken there. The Belgian authorities have therefore taken no action against Corten.

This story was well publicized by the Sunday Times (UK) (18 December 1983) and HRH Prince Philip, the Duke of Edinburgh, made a public appeal for the return of the animals to Brazil. At that time the public belief was that no other Golden-headed lion tamarins had been seen outside Brazil for over a hundred years. Now, however it seems there are at least twenty more.

In France, a medical practitioner, Dr H. Quinque of Bondy, has had a few of these tamarins since early in 1983 and in December had approximately thirteen tamarins, although it is not clear how many are *L. r. chrysomelas*. The Zoo de la Palmyre, Les Mathes, has acquired two pairs. The CITES Management Authority for France knows about all these tamarins and is investigating these cases although the owners claim that the imports took place before France became a CITES Party, that is before May 1978.

In addition, a dealer in Japan acquired a female and two young and offered them to The Hong Kong Zoological and Botanical Gardens in September. The Honorary Curator, Dr Kenneth Searle, checked with the Golden Lion Tamarin Management Committee (an international body based at the National Zoo, Washington DC, USA) before agreeing to take the animals and has assured their availability to the captive breeding programme currently based at the Rio de Janeiro Primate Centre in Brazil. These three animals were imported into Hong Kong with a Japanese re-export certificate stating that they had been bred in captivity in Georgetown, Guyana.

We now know of some 49 Golden-headed lion tamarins in captivity outside Brazil; some percentage can be expected to have died in transit, and it is quite probable that there are several more, of which we know nothing, held by private collectors. The wild population was thought to be less than 200 in 1981; thus in 1983 it may have been reduced by a quarter as a result of trade.

The Reptile Skin Trade in Bangladesh

by Jane Gilmour

Introduction

Although lizard, snake and crocodile skins were formerly important exports from Bangladesh, at present only skins of poisonous snakes can be legally exported. However, both internal and external trade in other species still continues.

Species Involved

The three lizard species of commercial importance are the Water monitor or Ringed lizard *Varanus salvator*, the Indian monitor or Black land lizard *V. bengalensis*, and the Yellow monitor or Yellow land lizard *V. flavescens*. The two former are more valuable but, at least in 1978-79, the last accounted for a much greater percentage of exports (Whitaker and Hikida, 1981).

The species of snakes involved in internal trade are, in order of importance, the Asiatic cobra *Naja naja*, Chequered keelback watersnake *Xenochrophis piscator*, Asiatic rat snake *Ptyas mucosus*, Indian python *Python molurus*, Russell's viper *Vipera russelli*, and King cobra *Ophiophagus hannah*. The Reticulated python *Python reticulatus* may also be involved as it has been reported as occurring in Bangladesh (Khan, 1982), but no skins were positively identified during the course of this study.

As the Mugger or Marsh crocodile *Crocodylus palustris* may well be extinct in Bangladesh (W. Akonda, pers. comm. 1981; Khan, 1982) and the Gharial or Indian gharial *Gavialis gangeticus* maintains only a localized and tenuous hold, the only species of crocodile now sold locally is the Estuarine or Saltwater crocodile *C. porosus*.

Legal Restrictions

The Wildlife (Preservation) Order came into force in 1973, but was not fully implemented 'in the field' until 1977 (W. Ali, pers. comm. 1982). The Order contains three schedules, the first of which is divided into two parts.

No reptiles are listed in Part I of the First Schedule that comprises a 'list of mammals, reptiles and birds of Bangladesh which are open to shooting and may be hunted on an ordinary game hunting permit'. Part II of the same schedule allows for the hunting by special permit of mammals, reptiles and birds the 'population increase of which threatens the balance of nature of a particular locality or becomes a threat to public life'. It has been suggested that certain protected species be moved to this section temporarily from time to time to allow for their export; these may include monitors (M.A.R. Khan, pers. comm. 1982).

The Second Schedule affects internal trade in reptiles in so far as a certificate of lawful possession is required for not only the possession, but also the transfer and import of any live animal listed in the Third Schedule, any trophy or meat derived from such, and the skins of lizard, crocodile and python.

The Third Schedule was intended as a register of all reptiles, mammals and birds present in Bangladesh other than those mentioned in the First Schedule and those endangering public life, but at present it is inaccurate and incomplete. The three species of monitor, all crocodiles and both the Indian and the Reticulated python are listed. An amended and comprehensive list has been produced by the Wildlife Department (F. Ahsan, pers. comm. 1982) although it has not yet been published (M.A.R. Khan, pers. comm. 1983). The Third Schedule gives a list of examples of animals considered to endanger public life (c.f. First Schedule, part II), such as poisonous snakes, which may be

destroyed even when immature.

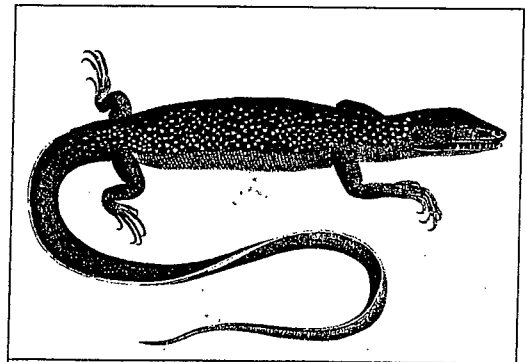
Bangladesh ratified CITES on 20 November 1981 and this became effective from 18 February 1982. Of the species commercially used, the Indian and Yellow monitors, the subspecies *molurus* of the Indian python and all three crocodilian species are listed on Appendix I. The Water monitor, the other subspecies of the Indian python and the Reticulated python are on Appendix II.

Internal Trade in Skins and Products

Although only poisonous snake skins can now be legally exported, dealers may trade internally in other reptile skins and products made from them using stocks of old skins. Raw lizard and snake skins have previously been processed along with cattle, goat and other hides in the numerous tanneries in Bangladesh (Olivier, 1979) and this must still occur in some places in order to supply the illegal export trade and probably some of the present thriving internal trade.

The pre-bargaining prices of skins and skin goods in Dacca shops are listed in Table 1; prices paid to lizard skin hunters in District towns are between a third and a sixth of these (Table 2). Bargaining may bring shop prices down by as much as a third, although a few shops (usually State-run) sell their goods at fixed prices. The vast majority of skins are sold to tourists and are already made up into bags, shoes, belts, wallets, purses, and other small leather goods. There are around twenty shops in Dacca selling these items and some specialized leather shops have 2000-3000 articles on display; they will also make goods to order.

A survey of made-up goods in these shops found that the percentage of different species represented on sale varied (Table 3). Asiatic cobra, Chequered keelback, monitor lizard and Asiatic rat snake goods were available in all shops. Crocodile skin goods were on display in most shops (generally around 10-30 articles; medium to large handbags being the main product; this gives a rough estimate of 15-30 crocodiles on sale throughout Dacca in Autumn 1981). Goods made from Russell's viper were the least commonly available. Nearly all of the shops offering skins for sale had Indian and/or Yellow monitor skins on display and most had Asiatic rat snake, Indian python and Asiatic cobra; Russell's viper and crocodile skins were only infrequently seen. No skins of Chequered keelback or King cobra were seen at all.



Export Trade

Tourists represent virtually the whole market for internal trade and seem to have no trouble taking reptile skin goods out of the country, but such exports are totally unrecorded. They may make up only a small part of the export volume, but the tourist trade enables goods made from species such as the Estuarine crocodile and the Indian python to be exported in significant quantities.

Lizard

A ban on the export of lizard skins may have been in force even before 1971 when Bangladesh became independent (W. Ali, pers. comm. 1982). However, if the ban existed, there were government-organised exports (by special permit) from time to time. Exporting continued after 1971, presumably by similar means. Approval of the last of these official exports was announced in 1977 when 56 dealers were issued with permits, and took place in 1978 (W. Ali, pers. comm. 1982). The President then announced a three-year ban on the collection and export of lizard skins other than existing stocks (W. Akonda, pers. comm. 1981; M.A.R. Khan, pers. comm. 1981; Olivier, 1979) and these contributed to the high export figures for 1978-1979 (Tables 4 and 5). The Bangladesh Wildlife Advisory Board (BWAB) met in September 1981 and recommended the lifting of the ban 'for the export of existing stocks in the hands of traders' because 'the present smuggling is causing loss of revenue to the Government' (Anon, 1981d). A royalty payment of five taka per skin was suggested but up until March 1982 these recommendations had not been acted upon (F. Ahsan, pers. comm. 1982). As Bangladesh has since become a Party to CITES the only lizard species which should

now be liable for consideration is the Water monitor, because the Yellow and Indian monitors are listed on Appendix I.

The Export Promotion Bureau (EPB) indicates, in its published statistics, that lizard skins formed the bulk of the skins and hides exported in the 1970s. In the peak year of 1978-79 lizard skins represented nearly 4.3% of the total value of leather exports for that year, which was 1199 million tk. (Anon, 1980a). Both the value and numbers of exported skins had been increasing until then, the value by five times and the numbers by nearly ten times in five years. The price per skin appears, however, to have fluctuated greatly over this period, with a high of 52.77 tk (US\$6.77) in 1973-74, dropping dramatically until 1975-76 when it stood at 9.73 tk (US\$0.67), then rising again until 1978-79 (Table 5). This is not a result of changes in the exchange rate as the taka/dollar rate generally increased during this seven year period (Bangladesh Bank, pers. comm. 1982) making Bangladeshi commodities relatively cheaper. The 1973-74 rise may have been related to the 1973 Indian restrictions on reptile trade and Japan's entry into the lizard skin market in a big way may also have affected the price (R. Whitaker, pers. comm. 1982). Japanese imports of lizard skin from Bangladesh nearly doubled in 1973 and increased

TABLE I
Prices of Tanned Skins and Skin Goods in Dacca

Species	Skin Length	Price ¹	Product	Price ¹
Indian and Yellow monitors ² (<i>Varanus bengalensis</i> and <i>V. flavescens</i>)	7-9"	12-20	clutchbag (8" x 3.5")	80-95
" "	12"	25-30	wallet	35
" "	12-15"	45-50		
Water monitor (<i>V. salvator</i>)	11.5"	69	clutchbag	95-145
"		(6 taka per inch)	wallet	65
"			sandals	300
Asiatic cobra (<i>Naja naja</i>) (ssp. <i>naja</i> and <i>kaouthia</i>)	3ft	75	clutchbag	95-110
	3.5ft	80-125	wallet	45
			wedge sandals	250
King cobra (<i>Ophiophagus hannah</i>)			clutchbag	95
Chequered keelback watersnake (<i>Xenochrophis piscator</i>)			clutchbag	75-110
			picture frame (5" x 7")	
Asiatic rat snake (<i>Ptyas mucosus</i>)	5ft	75	clutchbag	75-95
Indian python (<i>Python molurus</i>)	5ft	300	clutchbag	100-200
"	12ft	1200		
"		1500 with head		
"	15ft	2000		
"	16ft	2500		
Russell's viper (<i>Vipera russelli</i>)	3ft	90	clutchbag	115
			wallet	55
Estuarine crocodile (<i>Crocodilus porosus</i>)	1ft	140		
"	2ft	145		

¹ Prices quoted are all in taka. There were approximately £3.00 to 100 taka at the time of the survey.

² These figures are subject to variation as a system of bargaining operates in most shops.

² It was difficult to distinguish between these two species.

TABLE 2

Average Prices Paid to Lizard Hunters
in Mymensingh and Barisal Districts 1981*

<u>Species (trade name)</u>	<u>Length (in inches)</u>	<u>Price per skin@ (taka)</u>
Indian monitor (Bengal black)	10.5**	3-5
"	11.5	10-11
"	12.5	15-16
"	13.5	21-22
Yellow monitor (Oval grain)	9.5**	3-4
"	10.5	5-8
Water monitor (Ring lizard)		1 (per inch)

* This table is based on a more detailed one by Whitaker and Hikida, 1981.

@ The amount paid per skin varies from district to district.

** Minimum acceptable sizes.

by over 1 $\frac{1}{2}$ times in 1978 (Table 6).

From interviews with dealers (catchers, middlemen and exporters), Whitaker and Hikida (1981) estimated the relative percentages of different monitors being exported and their values per skin in 1978-79 (Table 7). From these, and the Wildlife Circle's (an administrative unit of the Forestry Dept.) figure for that year, they have calculated approximate numbers and export values for each species. The results show a slightly higher total export value than that given by the EPB (Table 4), probably because the latter's figures are based on the dealers' declarations of value/quantity (A.R. Mondol, pers. comm. 1982) which may be undervalued in some cases in order to reduce taxation. On the other hand, traders cannot always export their full permitted allowance on which they have paid royalties (W. Akonda, pers. comm. 1982). Evidence for this comes from the discrepancies between the Wildlife Circle's figures (Table 7) and those provided by the Divisional Forest Officer (Anon, 1982a), who collects royalties on numbers of skins declared by dealers and permitted by Government. Thus the Wildlife Circle's 1977-78 and 1978-79 numbers are 1039312 and 1890559 skins respectively, somewhat lower than the Forest Officer's 1978 figure of 3120700.

The sheer volume of lizard skin exported from Bangladesh in recent years suggests that Bangladesh is an entrepot for illegal skins from India and Burma (M.A.R. Khan, pers. comm. 1982; Inskipp, 1981). India banned the export of monitor skins in December 1975, but some exports have apparently taken place since then.

The value of imports from Bangladesh reported by Japan from 1975-77 (Table 6) was consistently higher than the value of exports to Japan reported by Bangladesh (Table 4). Although there is a half-year difference between the figures and both sets are derived using average exchange rates for the years concerned, the differences between Japan's imports of lizard skins in 1977 and the total exports from Bangladesh in 1976-77 and 1977-78 are 92% and 34% respectively. Bangladesh was reported to be one of the primary suppliers of lizard skins to Japan in 1981 (Milliken, 1981).

Bangladesh's nationally-reported customs hauls from August 1981 to March 1982 represent 50% of the legal export for 1978-79 (Table 8). Skins are variously mislabelled as wheatbran (Anon., 1982b), dry fish,

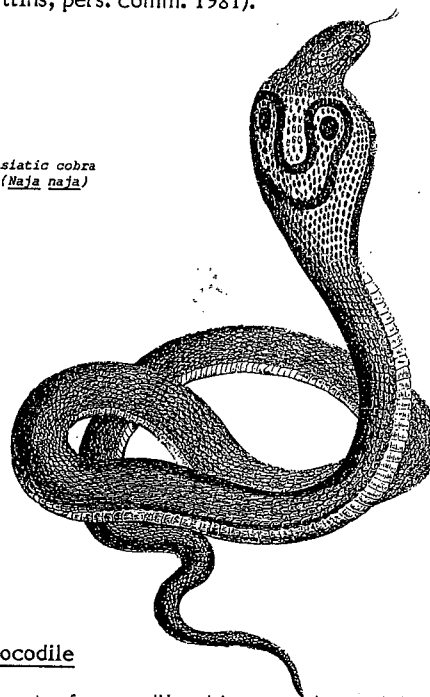
tamarind seed etc. (Anon, 1981) or smuggled in consignments of cow skins (W. Akonda, pers. comm. 1981). Destinations include Thailand, Singapore (Anon., 1981b; Anon., 1982b) and possibly Taiwan via Singapore (S. Anwar, pers. comm. 1981).

In February 1982, 150,000 skins were reported to be in storage awaiting the rescinding of the Presidential ban (Alam, 1982) and in September of that year the government issued a decree which made all privately owned lizard skins Government property henceforth. Any person not declaring such would be fined or imprisoned; in one month over two million pieces, valued at about 80 million taka (approximately US\$3.27m), had been declared (Anon, 1983).

Snake

There has been continuous, registered export of snake skins since 1978 (Anon., 1981a; Whitaker and Hikida, 1981; Table 5), and small quantities were exported previously e.g. to Japan in 1973, 1975 and 1977. The majority have been reported to be Asiatic rat snakes and Chequered keelback watersnakes (Whitaker and Hikida, 1981) even though only cobras, kraits and vipers are legally exploitable. At the Semaine Internationale du Cuir (Paris) in September 1979, the Bangladesh Handicraft Co-operative Federation was displaying bags made from *Python m. molurus*. These were presumably available for export from Bangladesh (Inskipp, 1979). In 1981 fifteen dealers had export permits (W. Ali, pers. comm. 1981) and the main destinations of skins were Thailand and Italy (F. Ahsan, pers. comm. 1982). As with lizard skins however, Bangladesh seems to be acting as a staging post for illegal export of Indian snake skins. India had banned the export of all snakes by 1975 and the last legal export was in 1976 to liquidate the stocks held by registered exporters (Inskipp, 1981). This coincided with the start of recorded exports from Bangladesh (Table 5). In April 1982 there were applications for import into the U.K. of 60,000 Chequered keelback watersnake skins from West Germany (WTMU, pers. comm. 1982). The origin of these skins was given as Bangladesh, which either suggests very large scale exploitation or that some skins came from elsewhere. In 1980 there was an unconfirmed report of 250,000 python skins coming into Bangladesh from India (P. Gittins, pers. comm. 1981).

*Asiatic cobra
(Naja naja)*



Crocodile

Export of crocodile skins was banned before 1971, except for occasional government-organised exports (as

TABLE 3

Estimated Percentages of Made-up Goods on Sale by Species

<u>Species</u>	<u>Shop A</u>	<u>Shop B</u>	<u>Shop C</u>	<u>Shop D</u>
Cow and sheep	30	40	75	15
Indian and Yellow monitor	25	30	4	17
Water monitor	5	5	1	3
Asiatic cobra	15	-	5	20
Chequered keelback watersnake	10	15	15	20
Asiatic rat snake	1	0-1	0-1	10
Indian python	1	5	0-1	2
Russell's viper	-	1	-	1
King cobra	1	-	-	1
Estuarine crocodile	10	0-1	0-1	8
Other skins (Spotted deer, tiger, leopard)	2	4	0-1	3
	<u>100</u>	<u>100+</u>	<u>100+</u>	<u>100</u>

The 4 shops were representative of the range and quantities of goods sold.

with monitors) (W. Ali, pers. comm. 1982). No evidence of any recent commercial trading in these was discovered in the preparation of this report, and there is no record of skins exported from or originating in Bangladesh in CITES trade statistics for 1980-82 (WTMU, pers. comm. Nov. 1983).

Possible Effects on Population Levels

No studies have been carried out recently on the population levels of reptiles, other than crocodiles, throughout Bangladesh, although a study of density of monitor lizards in localized areas has been made by W. Akonda, F. Ahsan and M. Rahman, and Dr. M.A.R. Khan has provided a much needed guide to the status and range

of species in his 'Wildlife of Bangladesh - A Checklist' (1982). It is difficult therefore to discern what effect trade has had on species' numbers.

Most commercially-valuable snakes and the Indian and Yellow monitors occur throughout Bangladesh in suitable habitats and appear at present to be common according to Khan (1982). However, Whitaker and Hikida (1981) comment that the three monitors 'are or were heavily exploited for the skin industry and appear to be seriously depleted in some districts' and Olivier (1979), stated that a recent business venture (prior to the Presidential ban) failed because not enough lizard skins could be obtained to support an export business based on them alone. The Indian and Yellow monitors were included in Appendix I of CITES in 1973 at the request of both India and Bangladesh presumably because they were acutely threatened by trade (Inskipp, 1981). The Water

TABLE 4

Exports of Hides and Skins (mainly Lizard skin)

<u>Year (July-June)</u>	<u>Total Value¹ in taka</u>	<u>Total Value in² US\$ approx.</u>	<u>Destinations³ where known</u>	<u>% to each³</u>	<u>Value in³ million taka</u>
1973-74	10490000	1347368			
1974-75	3226000	328179			
1975-76	8658000	593014			
1976-77	8578000	560287			
1977-78	12243000	802820	Japan	98.4	12.0
			Hong Kong	0.8	0.1
			Italy	0.8	0.1
			Fed.Rep.Germany	negligible	negligible
1978-79	51430000	3401455	Japan	97.3	50.0
			Hong Kong	0	negligible
			Italy	2.7	1.4
			Fed.Rep. Germany	negligible	negligible
1979-80	9651000	636190			

- 'Export from Bangladesh during the Fiscal Years 1973-74 to 1979-80', Export Promotion Bureau, Dhaka. The figures for 1979-80 were incomplete; the above figure was supplied by Abdur Razzak Mondol of the EPB.
- Using approximate average exchange rates produced from figures supplied by Bangladesh Bank, Dhaka, of exchange rates on Dec 30 and June 30 of each year.
- 'Bangladesh Export Statistics 1978-79', Export Promotion Bureau, Dhaka.

TABLE 5

Export of Lizard and Snake Skins

Year (July-June)	Number of lizard ¹ skins	Average value/skin (using Table 4 figs)		Amount of ¹ snake skins
		Taka	US\$	
Pre-1970	Probably not over ² 100000			
1972-73	158765			
1973-74	198900	52.77	6.77	
1974-75	307790	10.48	1.07	
1975-76	889567	9.73	0.67	
1976-77	713756	12.02	0.78	
1977-78	1039312	11.78	0.77	
1978-79	1890559	27.20	1.8	300
1979-80		22.32	1.47	432400

- 1 Source for the figures was the Wildlife Circle (Anon, 1981a); they had been collected from another Government Department, presumably the Export Promotion Bureau or Customs.
- 2 Whitaker and Hikida, 1981.

TABLE 6

Japanese Imports of Lizard Skin and Leather, and Snake Skin from Bangladesh
1972-1981*

Year	Snake Skins (kg)	Approx US\$ Value	Total (kg)	Approx. US\$ Total Value
1972	-	-	17760	136725
1973	600	7318	33267	300443
1974	-	-	36450	277750
1975	721	16494	35360	610154
1976	-	-	37893	704221
1977	343	17967	33334	1091775
1978	-	-	56005	2682718
1979	-	-	28401	287831 (yen)
1980	-	-	13857	160355 (")
1981	-	-	10610	141338 (")

* Japan Exports & Imports: Commodity by Country. Japan Tariff Association.

monitor, once apparently widespread (Smith, 1935 remarked that it was reported to have occurred in Eastern Bengal), is now confined largely to the reserved forest of the Sundarbans (Whitaker and Hikida, 1981), although it does occur elsewhere in the coastal districts southwards as far as Cox's Bazaar (Akonda, *et al*, in press) and St. Martin's Island and is common in those areas (Khan, 1982). Whitaker and Hikida suggested that the disappearance of the Water monitor from most areas is closely tied to its need for dense cover. Of the commercially-valuable snakes, the Asiatic rat snake appears to be suffering similar local losses to those experienced by the monitors (Whitaker and Hikida, 1981); subspecies *naja* of the Asiatic cobra is uncommon; the Indian python is also generally uncommon, but common in the Sundarbans; the King cobra is uncommon and occurs in the Sundarbans and forests of Chittagong and Sylhet Districts (Khan, 1982). The former status of the last three taxa is not known, so no conclusions can be drawn as to the effects of trade. Similarly other species may be

depleted, but no information has been found on this.

There are reported to be around 200 Estuarine crocodiles in the Sundarbans mangrove swamps (Khan, 1982). In 1979 Olivier reported that 'it appears that almost every crocodile that presents the opportunity is killed'. There were a fair number of bags made from this species on sale in 1981-82 however, so it is likely that the population may still be threatened from exploitation. There have been no recent reports of the Mugger, although a few individuals may survive in remote areas, such as the northern parts of the Sundarbans. Prior to 1950 it was not uncommon and hunting has been one of the major factors contributing to its decline according to Groombridge (1982). The Gharial is almost extinct in Bangladesh with 20 or less surviving in the lower courses of the Ganges (Padma) and Brahmaputra (Jamuna) rivers (Khan, 1982). Hunting has been a major factor in its decline over much of its international range (Groombridge, 1982), and may well have been so in Bangladesh.

Environmental Value

Monitors prey on rodents, insects, snakes and their eggs, etc., in Bangladesh (Whitaker and Hikida, 1981; M.A.R. Khan, pers. comm. 1981; S. Anwar, pers. comm. 1981). Studies in India also suggest that rodents form a major component of their diet, although the same may not be entirely true for Bangladesh, where aquatic life could play a more important role (J. Brookes, pers. comm. 1982). In Bangladesh rodents are a serious agricultural pest destroying over half a million tons of food grain every year (Whitaker and Hikida, 1981) and a possible reason for the failure of the lizard-skin enterprise mentioned above is that villagers, aware of the value of monitors in controlling rats and other pests, refused to

co-operate (Olivier, 1979). In some areas lizard hunters are not allowed by local people to hunt near the villages (Whitaker and Hikida, 1981). Rat snakes are also known to feed on rodents.

Whitaker and Hikida have formulated a project to study the potential of biological control with monitor lizards and Asiatic rat snakes. The Water monitor was introduced into a forestry plantation of *Acacia*, which had suffered severe rodent damage, and subsequently the survival of saplings improved (W. Akonda, pers. comm. 1981). Similar introductions have been tried elsewhere with apparently positive, though unquantified, results (Whitaker and Hikida, 1981).

It has been reported in certain areas of India that the Gharial, when formerly more abundant, exerted a

TABLE 7

Estimated Numbers of Each Lizard Species Exported in 1978 - 1979¹

Species	% of total lizard skin exports	No. of Skins	Average value of skins		Total export value	
			in US\$	(taka ²)	in US\$ approx.	(taka ²)
Yellow monitor <i>V. flavescens</i>	70	1323391	1.60	(24.19)	2117426	(32017598)
Indian monitor <i>V. bengalensis</i>	25	472640	3.00	(45.363)	1417920	(21440368)
Water monitor <i>V. salvator</i>	5	94528	3.00	(45.363)	283584	(4288074)
TOTAL	100	1890559			3818930	(57746040)

1 The information in this table is taken from Whitaker & Hikida, 1981.

2 The figures in taka have been converted from those in US\$ using a conversion rate of 15.121 tk to the \$ (average estimated using figures supplied by Bangladesh Bank).

TABLE 8
Confiscation by Customs of Consignments of Lizard Skins
August 1981 - March 1982

Species	Date occurred	Source	Place	Destination	No. of skins	Value (taka)
?	(6.9.81)	1	Khulna	?	(89000 or 167000)	5000000
Yellow monitor	(19.10.81)	2	Dacca	Bangkok	5006	150000
Indian monitor	(11.1.82)	3,4,5	Khulna	Singapore	(268000)	15000000
?	(16.2.82)	5	Khulna	?	2200	(66000 - 123000) [@]
?	(19.3.82)	6	Dhaka	?	(89000 or 167000)	5000000
ESTIMATED TOTALS					(453206-609206)	(25216000) (25273200)

1. The New Nation, 6.9.81 2. Bangladesh Observer, 22.10.81 3. The New Nation 17.1.82 4. The Bangladesh Times 24.1.82 5. Traffic Bulletin, IV(1) 6. The New Nation 20.3.82.
[@] This gives an estimated value of 30tk/piece, which is a 24% increase on Whitaker & Hikida's 1978-79 rate (see above). Assuming a similar increase has occurred in the price of the other monitor skins, their unit price would be about 56 tk.
 (The bracketed figures under "No. of Skins" refers to an estimation of the number of skins confiscated).

significant control over predatory fish that feed on commercially important species and so depletion of Gharial has indirectly contributed to the decline of fisheries (Groombridge, 1982).

Proposed Reptile Breeding Schemes for Commercial Purposes

The Forestry Department is considering proposed schemes for use of lizards, snakes and crocodiles including crocodile farms and the breeding of snakes for the collection of snake venom.

Conclusions and Recommendations

Reptile skins from Bangladesh are still traded in considerable numbers, both internally and internationally, despite legal protection and export controls.

Tourists unwittingly add to the problem as they represent the main outlet for the internal trade, which subsequently becomes a component of the export market.

Some species may prove to be useful in terms of pest control and some have suffered from over-exploitation and habitat loss.

More staff specifically trained and employed to enforce the Wildlife Act are needed to curtail hunting and more research is needed on the distribution and population density of the species involved in order to assess the effects of trade. Meanwhile, banning the export of poisonous snakes would help prevent the trading in other species. If the studies show that certain species can withstand a profitable level of exploitation without harming their populations then, with strict monitoring of enforcement and export, realistic annual catch quotas could be set.

General publicizing of the species protected by the Wildlife Act may help to reduce exploitation and the revision of Schedule 3 needs to be finalized and published. The allowance of internal trade in old skins creates an enforcement problem and should be banned until the results of the above studies are known. Leaflets and posters at Zia Airport and in international hotels in Dacca would increase the awareness of foreign visitors of the protected species and export controls.

Countries importing skins and skin goods of protected species could help prevent illegal trade by insisting on export licences from Bangladesh.

Finally, it is hoped that the proposed study of the monitors and the Asiatic rat snake will take place and that the proposals for captive-breeding of crocodiles and snakes will also mature.

Acknowledgements

I would particularly like to thank Dr M.A. Reza Khan, Assistant Professor in the Zoology Dept. of Dhaka University, Mr Wahab Akonda, the Senior Research Officer in the Wildlife Circle, the staff of WTMU and Dr Paul Gittins for their immense help and enthusiasm. For help and information, I also thank Mr Farid Ahsan, Mr Mukhleshur Rahman and Mr Wazid Ali of the Wildlife Circle, Mr Shamsul Anwar, the Deputy Chief Conservator of Forests in the Development Corporation, Mr Abdur Razzak Mondol, the Deputy Director of the Export Promotion Bureau, Mr Romulus Whitaker, the Director of the Madras Snake Park Trust, Dr Joe Brookes, a consultant to the Bangladesh Agricultural Research Institute and Dr Brian Groombridge. The Chief Conservator of Forests and Mr Katebi and Mr Sarker, successive Conservators of Forests (Wildlife Circle), have been most kind in providing official approval for this research. Appreciation is also due to Dr Gittins and John A. Burton for providing useful comments and suggestions on the draft of this report.

References

- Akonda, A.W., Ahsan, F., and Rahman, M.:
In press. Monitor Lizards of Bangladesh.
- Alam, J. 1982:
Lizard Skin Smuggled. Holiday Vol. 17(27):3.
- Anon. 1973:
Bangladesh Wildlife (Preservation) Order, 1973. Bangladesh Gazette, Extraordinary, part II A, 28.3.73. Govt. of the People's Rep. of Bangladesh Ministry of Law & Parliamentary Affairs
- Anon. 1980a:
Export from Bangladesh during the Fiscal Years 1973-74 to 1979-80. Export Promotion Bureau, Dhaka.
- Anon. 1980b:
Bangladesh Export Statistics 1978-79. Export Promotion Bureau, Dhaka.
- Anon. 1981a:
Data of Exported Lizard Skin. Mimeo. Wildlife Circle.
- Anon. 1981b:
5006 pieces of lizard's skin hauled. Bangladesh Observer 22.10.81 p. 3.
- Anon. 1981c:
Tk 50 Lakh Customs Haul in Khulna. The New Nation 6.9.81 p. 2.
- Anon. 1981d:
Minutes of 5th Meeting of Bangladesh Wildlife Advisory Board, 28.9.81. Unpublished report. Bangladesh Wildlife Advisory Board.
- Anon. 1982:
Lizard Skin Smuggling Foiled. Traffic Bull. Vol IV(1):7
- Anon. 1982a:
Information on Export of Lizard Skin during 1978-79 (1978). Mimeo.
- Anon. 1982b:
Probe into Lizard Skin Smuggling Demanded. The Bangladesh Times 24.1.82 p. 5.
- Anon. 1982c:
Lizard Skin Worth Tk. 1.5 Cr Seized in Khulna. The New Nation 17.1.82 p. 1.
- Anon. 1982d:
Lizard Skin Worth Tk 50 Lakh Seized. The New Nation. 20.3.82 p. 1.
- Anon. 1983:
Bangladesh Decree on Lizard Skin. Traffic Bull. Vol IV(6):65.
- Groombridge, B. 1982:
The IUCN Amphibia-Reptilia Red Data Book Part 1. IUCN
- Inskipp, T. 1979:
Report on a visit to Semaine Internationale du Cuir on 10 September 1979. Unpublished report.
- Inskipp, T. 1981:
Indian Trade in Reptile Skins. WTMU, Cambridge.
- Khan, M.A.R. 1982:
Wildlife of Bangladesh - A Checklist. Univ. of Dhaka Press, Dhaka.
- Milliken, T. 1981:
Wildlife Shopping in Tokyo - 1981. Traffic Bull. vol III(3/4):43-45, 47.
- Olivier, R. 1979:
Wildlife Conservation in Bangladesh. Rep. to FAO.
- Smith, M.A. 1935:
Reptilia and Amphibia. Vol II Sauria. In Sewell, R.B.S. (Ed.) The Fauna of British India, including Ceylon and Burma. Taylor and Francis, London.
- Smith M.A. 1943:
Reptilia and Amphibia. Vol III Serpentes. In Sewell, R.B.S. (Ed.) The Fauna of British India, including Ceylon and Burma. Taylor and Francis, London.
- Whitaker, R. and Hikida, T. 1981:
Report of Project Formulation Mission to Bangladesh (20 June - 22 July 1981). FAO Action Programme for the Prevention of Food Losses.

EEC CITES Regulation

The regulations on the implementation of CITES in the European Community came into force on 1 January 1984. The implications of the Regulation (EEC No. 3626/82) have been discussed by Simon Lyster (Traffic Bulletin 4(6):69-70). The UK has incorporated the requirements of the Regulation into its existing conservation controls on the import and export of wildlife. Article 15 allows Member States to take stricter measures for conservation purposes. The UK is taking stricter measures on several categories of wildlife and products: (i) diurnal birds of prey, Falconiformes (ii) eggs or plumage of any bird (iii) hair, yarn or cloth made wholly or partly from *Vicuna vicugna* (iv) wild or artificially propagated plants from the following genera of cacti - *Ancistrocactus*, *Ariocarpus*, *Aztekium*, *Backebergia*, *Copiapoa*, *Coryphantha*, *Discocactus*, *Epithelantha*, *Eriosyce*, *Islaya*, *Leuchtenbergia*, *Lobeira*, *Obregonia*, *Pediocactus*, *Pelecypora*, *Pilocopiapoa*, *Sclerocactus*, *Strombocactus*, *Thelocactus*, *Turbinicarpus*, *Uebelmannia*. This list comprises about 150 species of cacti which are rare and/or difficult to cultivate. Thirty-three of the 40 North American species on CITES Appendix I are included, most of the remainder being additional species from North America, with some from Chile, Peru and Brazil. There has been some relaxation of controls on artificially propagated plants on CITES Appendix II. Many of these can now be imported into the UK from other EC countries with only a phytosanitary certificate.

Controls on the many species of animals and plants not covered by the Regulation but listed in the Schedules of the Endangered Species (Import and Export) Act 1976, and subsequent amendments, will be administered as before.

Tim Inskipp, WTMU

★ CITES NOTIFICATIONS ★

Giant Panda on Appendix I

As from 14 March 1984, the Giant panda (*Ailuropoda melanoleuca*) will be transferred from Appendix III to Appendix I of CITES, following a proposal from the People's Republic of China. This proposal was originally submitted for consideration at the CITES Conference in Botswana in April 1983, however submission was made too late. In view of the recent indications that this species may be involved in commercial trade, China requested that the proposal be considered by the postal procedures. The Secretariat considers that these procedures for amending Appendices I and II should be used only in cases where there is an urgent need. As no objection to the amendment proposal has been received, and as there is evidently an urgent need for this amendment, the CITES Secretariat supported China's request.

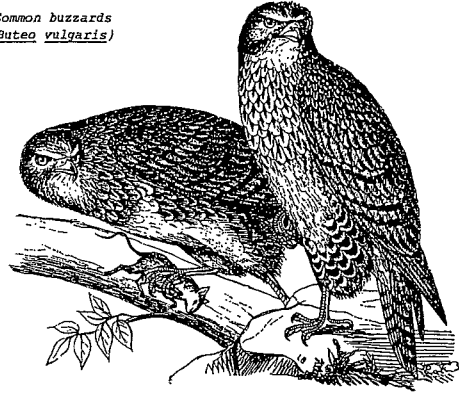


Giant panda (*Ailuropus melanoleucus*)

Exported Falconiformes to be Banded

With effect from 1 August 1983, all diurnal birds of prey (Falconiformes) exported from the United Kingdom must be banded with either a uniquely numbered (UK + 5 digits), Department of the Environment (DoE) cable tie (plastic band in colour green, blue or black) or a DoE close-ring (brown metal ring with unique number beginning DoE + 4 digits and a letter indicating ring size).

Common buzzards
(*Buteo vulgaris*)



Indian Snakes on Appendix III

India submitted the following list of species for inclusion in Appendix III which took effect from 13 January 1984:-

- Atretium schistosum* - Olive keelback watersnake
- Cerberus rhynchops* - Dog-faced watersnake
- Natrix (=Xenochrophis) piscator* - Chequered keelback watersnake
- Ptyas mucosus* - Asiatic rat snake
- Naja naja* - Asiatic cobra
- Ophiophagus hannah* - King cobra
- Vipera russelli* - Russell's viper

Bird Shooting in Kenya

Kenya's Minister for Tourism and Wildlife, Mr Maina Wanjigi, has announced that the ban on hunting of birds has been lifted and would earn the country more foreign exchange. The success of bird hunting would determine whether big game shooting would be allowed, he said.

Before the hunting ban was introduced, bird shooting was carried out on a concession basis whereby particular areas were allocated to individual hunting companies. Kenya's conservationists are concerned that this system is open to misuse by companies who adopt a 'make a fast buck and run' attitude and give no thought to sustainable utilization in the future.

Conservationists are therefore lobbying for a system whereby the number and species of birds taken would be closely controlled by licences only allowing hunting companies access to small areas of country for limited periods. It has also been suggested that a dual regulatory system is introduced so that the administration of controls is overseen by more than one person, Kenya's bird shooting season ends on 31 March and it seems unlikely that the technical problems will have been sorted out by then. A more realistic date for the commencement of bird shooting is when the new season starts in October 1984.

Sources: WWF/IUCN Eastern Africa, WWF UK

World Trade in Tegu Skins

by Ginette Hemley

INTRODUCTION

The skins of tegu lizards Tupinambis spp. have been in great demand by the leather industry for the manufacture of watch straps, shoes, handbags and other products for many years. In early 1977 the genus was listed on CITES Appendix II and recent interest has focused on the large numbers of tegu skins annually reported in international trade. Concern over the heavy exploitation of these South American lizards is enhanced by the apparent lack of information about their biology and population structure.

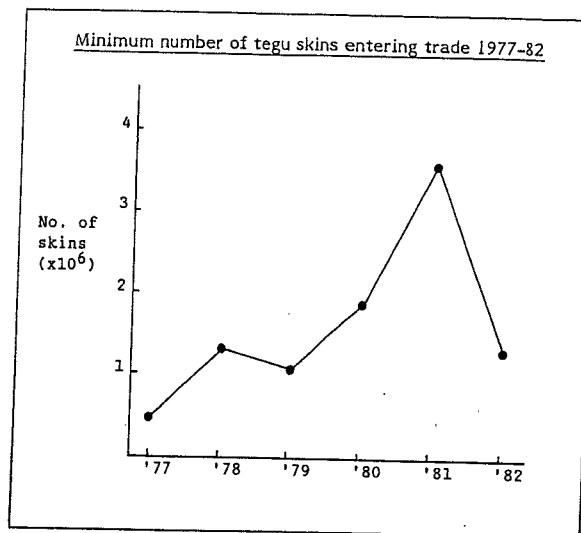
This report presents an analysis of CITES-reported trade in Tupinambis spp. for the years 1977-1982 inclusive. The complexity of trade patterns involving Tupinambis necessitated limiting the scope of these analyses to the trade in whole skins only. As the aim of this report is to provide baseline data on the number of animals killed for trade each year, it was generally concluded that little additional relevant information would be gained from analyses of the trade in tegu skin products. Likewise, the trade in live specimens of Tupinambis was excluded as it appears to be relatively insignificant.

This report cannot be comprehensive as the information supplied by CITES Parties is incomplete, especially for the earlier years 1977-1979. However it is important to note that CITES reporting has improved and generally continues to improve, although considerable discrepancies still exist between the reports of importing and exporting states. In addition, some CITES Parties apparently trading in Tupinambis skins have not produced annual reports, and many other countries involved in the tegu skin trade were not party to the Convention during the period covered by this analysis. Thus, the figures analysed for this report are restricted to those supplied by a relatively small number of countries (Table 1).

METHODS

Data pertaining to trade in whole skins of Tupinambis spp. were computer processed to produce a comparative tabulation. In this type of tabulation all transactions in a selected product between two states are summarised by country of import, country of export, and country of origin.

All whole-skin transactions of tegus were reported to be either of Tupinambis spp. or Tupinambis teguixin. An



initial analysis indicated that the same transaction may be reported in different categories by the two Parties involved and that some Parties report skins of the same species in two different categories. Such taxonomic inconsistencies in reporting tegu skin trade frustrated efforts to find logical correlation in numbers of skins imported and exported and as a result, all reported trade in tegu skins was treated under the heading Tupinambis spp. This method contrasts with one employed in a previous report on the trade in tegu skins (Anon, 1983).

Minimum gross reported imports and exports were calculated for each of the six years. When precise quantitative correlation between two trading countries was not found, the larger of the figures reported was noted. Each country's imports were then compared with its exports to derive its net imports or net exports. Finally, all net imports were summed to determine the minimum number of skins reported entering trade each year. It should be pointed out, however, that some skins of Tupinambis may enter trade in more than one year and thus have the potential of being included in the overall figures more than once.

RESULTS

1. Summary of Reporting

Although there are indications that CITES reporting has

TABLE 1

Summary of Reporting by CITES Parties for Trade in Tupinambis

Year	Number of CITES Parties	Number of Parties Submitting CITES Reports	Number of Parties Reporting Trade in <u>Tupinambis</u>	Total Number of Countries Reported to be Trading <u>Tupinambis</u>
1977	40	27	5	12
1978	47	32	9	9
1979	55	33	7	12
1980	61	32	9	16
1981	74	36	9	18
1982	77	14*	7	15

*As of Dec 1, 1983

generally improved in recent years, for Tupinambis it has been variable in terms of nomenclatural specificity and the number of countries reporting trade. The total number of transactions summarised (see under Methods) for CITES-reported trade in tegu skins increased from 20 for 1977 to 159 for 1982 and illustrates increased reporting of trade and a general improvement in specificity. It is not known to what extent this reflects a real increase in the number of transactions.

When all trade records referring to tegu were considered in a single category some quantitative correlation between the figures of importing and exporting countries was found. Even then, however, a general lack of correlation resulted from inaccurate or incomplete reporting by CITES Parties and from the absence of records of non-parties and of some Party states.

2. Sources of Tupinambis Skins

The genus Tupinambis is distributed generally throughout South America east of the Andes. Tupinambis teguixin, the primary species exploited for the skin trade, occurs in all South American countries save Chile and possibly Ecuador, and additionally in Trinidad and Tobago (Groombridge, 1983). The only other described species, T. rufescens, is found in Argentina, Bolivia, Brazil, Paraguay and Uruguay (Groombridge, 1983) and appears to play no significant part in the skin trade.

Despite this wide geographical range, the vast majority of skins reported entering trade apparently originated in just two countries - Argentina and Paraguay. Their total net exports of tegu skins from 1977-82 amounted to some eight million, that is over 94% of the 8.5 million tegu skins leaving South America.

Relatively small quantities of skins were exported from Colombia (185275 net), Peru (60164 and 20297 metres net), Uruguay (69343 net), Brazil (11000 net) and Panama (5998 net and 2 shipments). It is worth noting, however, that Tupinambis does not occur in Panama and that only T. rufescens occurs in Uruguay (Groombridge, 1983).

TABLE 2

Summary of Transactions Reported by CITES Parties for Trade in Tupinambis

Year	Total No. of Transactions* Listing:	
	<u>Tupinambis</u> spp.	<u>Tupinambis teguixin</u>
1977	13	7
1978	23	34
1979	30	44
1980	37	79
1981	66	93

1982 excluded because not all data analyzed are in the same format as previous years.

* These are summarised transactions (see 'Methods').

COUNTRIES IMPORTING TUPINAMBIS SKINS

According to CITES reports, the US, Italy and the UK are the leading importers of tegu skins directly from Argentina, the US appearing consistently as the major importer each year. Additionally France, Mexico and Spain each apparently received large numbers from Argentina in 1981, and in 1982 Argentina reported exporting smaller numbers of skins to Panama and Paraguay.

The US, Italy, FR Germany, UK and Argentina are the only countries reporting imports directly from Paraguay between 1977 and 1982. However prior to 1980, only the US and FR Germany were reported as direct importers of tegu skins from Paraguay and for 1982 only the US reports importing such skins. It should, however, be noted that at the time of writing, relatively few 1982 CITES reports have been received by the CITES Secretariat.

In addition to the importing countries listed above, several countries appear to have imported substantial numbers of tegu skins primarily from non-source (entrepot) countries. These importers include: Switzerland, Hong Kong, Canada, Colombia and Austria.

TABLE 3.

Major countries reported importing Tupinambis skins Gross imports 1977-1982 (Combined)

US	8624696
Italy	1170792
Argentina	439966
UK	398678
Switzerland	224402
F.R. Germany	196578
France	175353

In addition to being the major producer of tegu skins, Argentina appears to be the major re-exporter: about 21% of the reported 2.9 million skins exported from Argentina during 1981/82 originated in Paraguay. Italy, France and the US re-exported skins originating mostly in Argentina, while Haiti, a non-CITES country, appears as a major re-exporter of Paraguayan tegu skins according to the US CITES reports for 1981 and 1982.

France, which reports a large number of re-exports, has unfortunately failed to report importing tegu skins for any of the six years under consideration.

DISCUSSION

As mentioned above, some caution should be exercised when interpreting the figures representing the minimum number of skins of Tupinambis spp. reported to be entering trade (Table 5) as the quality and extent of reporting, as well as the methods of analysis used in this study can potentially affect the outcome.

The results indicate that the minimum number of skins entering trade each year has increased substantially since 1977. The trade apparently reached a peak in 1981 and then fell by almost two-thirds during 1982.

The apparent increase in tegu skin trade since 1977 can be largely attributed to more accurate reporting by CITES Parties. If, however, reporting has improved yearly from 1977-1982 as is generally evidenced, then the apparent decline in the trade from 1981 to 1982 is probably a true reflection of the trade pattern, although not necessarily of the extent of decline which may be underestimated.

While not all major CITES tegu-importing countries have submitted reports for 1982 (eg. Italy, UK), figures reported by Argentina, the major exporter, show a substantial decline from 2000829 skins exported in 1981 to about 960088 skins exported in 1982. A decline is also apparent in imports reported by the US, the major importer, which totalled 1,213,036 skins in 1982, less than 40% of the number imported in 1981. It might be added that, for both years, there is better than 97% correlation between corresponding figures reported by Argentina and the US.

More noticeably, figures reflecting Paraguay's tegu skin exports show a decrease of 82% from at least 1452365 skins in 1981 to a minimum estimate of 263,717 skins in 1982. The US and Argentina together imported about 85% of all skins reported to be from Paraguay in 1981, and the US reported a substantial decrease in imports from Paraguay for 1982.

TABLE 4

Major countries reported exporting Tupinambis skins
Gross exports 1977-1982 (Combined)

Argentina	6181820
Paraguay	2256344
Italy	681189
France	585000
US	363389
Haiti	298600
Spain	274807

One can only speculate on the reasons for the seeming decline in the tegu skin trade. Paraguay banned export (but not re-export) of all wildlife and wildlife products in late 1981, and this action may have caused a decrease in exports. Argentina was the major re-exporter of Paraguayan skins reported in trade in 1981, and export controls enforced in Paraguay may have affected the total number of skins available to Argentina. Only the US reported imports of tegu skins from Paraguay in 1982.

There is some indication that the US reptile leather market has been depressed for the last one or two years (Lehman, 1983), which may have affected total US imports of tegu skins. It is possible, too, that the US market for Tupinambis leather may have actually been saturated by the end of 1981, and demand may well have been affected by the general economic recession, resulting in less importation in 1982.

One further and more disturbing possibility is that over-collection of tegu lizards may have reduced their wild populations to such an extent that they can no longer be caught in such quantities as hitherto.

TABLE 5

Minimum number of skins of Tupinambis spp.
reported entering trade (Net)

1977	439697 (+)
1978	1263302 (+)
1979	1009523 (+)
1980	1869363 (+)
1981	3594888 (+)
1982	<u>1278025</u>
TOTAL	9.5 million +

(+) Denotes one or more additional transactions reported with number of skins unspecified.

In an effort to assess the status of certain Argentine tegu populations and the possible deleterious effects of trade, authorities of the Direccion Nacional de Fauna Silvestre are seeking funds to support a complete biological and ecological study of Tupinambis. The study would be carried out in Salta, a province of Argentina, and intends to incorporate a scheme for controlled harvesting. This will provide the first scientific basis for the sustainable utilization of tegu lizards throughout Argentina.

CONCLUSIONS

The data considered in this report are too incomplete to state conclusively the number of tegu lizards killed annually for the leather industry. However, it appears that during the six years considered by this report, at least 9.5m skins have been in trade. At least 8.5 million skins left South America during this period.

Data in the CITES annual reports suggest that trade in Tupinambis skins has increased, the greatest number of skins entering trade in 1981. More accurate reporting, rather than a rise in the number of reporting Parties, probably accounts for a large part of this apparent increase as both the number of CITES Parties reporting trade in tegu skins and the total number of countries reported to be trading in Tupinambis has fluctuated from year to year.

A reduced demand resulting from changes in fashion and a general recession in world trade, in addition to protective legislation may all have contributed to the apparent decrease in the number of tegu skins being traded internationally in 1982.

REFERENCES

- Anon, 1983:
International Trade in Skins of Monitor and Tegus Lizards 1975 - 1980. Traffic Bulletin 4 (6):71-79.
- Groombridge, B. 1983:
World Checklist of Threatened Amphibians and Reptiles. Nature Conservancy Council of Great Britain.
- Lehman, L.H. 1983:
A Perspective From the Reptile Leather Industry. Traffic (USA) Newsletter 5(2):4-5.

This report was produced by Ginette Hemley, Assistant Director of Traffic (USA), who has been working at WTMU for the past three months involved in a variety of projects.

Caribbeans Urged to Join CITES

Following a Resolution of its XVIIIth Annual General Meeting, in October 1983 the Caribbean Conservation Association, based in Barbados, sent a letter to all Caribbean countries not party to CITES, urging them to give serious consideration to joining the Convention.

These countries are:- Antigua/Barbuda, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Honduras, Jamaica, Mexico, St. Kitts/Nevis, St. Vincent, the Grenadines and Trinidad and Tobago. The last has since acceded (see p. 51).

The Turks and Caicos Islands are a UK Associated state but have chosen not to be part of the UK implementation of CITES. The Netherlands Antilles, belonging to the Netherlands, will hopefully be covered by the Convention when the latter ratifies CITES.

Course for Pet Shop Owners

The Dutch Pet Trade Organisation DIBEVO, in co-operation with the Ministry of Agriculture & Fisheries, has started a course for its members on pet health in relation to housing, feeding and care. The 6-day course is aimed at giving pet shop owners more detailed information about medicines and the welfare of animals.

Source: International Pet Trade Organization (IPTO) Bulletin No. 3, 1.11.83.

Sandalwood Smuggling in India

The White Sandalwood (*Santalum album* Linn.) is a small to medium-sized parasitic tree occurring mainly in seasonal moist forest areas in parts of south and south-east Asia, of great commercial importance for its hard close-grained and oil-rich heartwood.

The species occurs on the islands of Timor and Sumba and at relatively few other localities in Indonesia (including Bali, Java and Sulawesi), and also in Sri Lanka and in southern India. Sandalwood is thought to be indigenous to Timor and Sumba, but may have been introduced to other parts of Indonesia (in association with Hindu temples) and to Sri Lanka and India. In India, Sandalwood occurs mainly in southern Karnataka, especially around Mysore (an important centre for the Sandalwood industry), but also in the Nilgiri Hills area and other parts of Tamil Nadu.

Sandalwood provides one of the oldest known perfumery materials, its use is recorded many hundreds of years ago in China and southeast Asia. Whilst the use in Europe appears to have expanded during the past century, Sandalwood was one of the exotic substances imported by the Romans from (or through) the Malabar Coast of southwest India.

Commercially useful heartwood is found in branches and roots down to a couple of centimetres diameter. The wood may be carved to produce items such as trinket boxes, or may be powdered and subjected to steam distillation in order to produce sandalwood oil. The pale yellow oil has a well-known sweet woody scent of its own and also blends well with a variety of other perfumery substances. In Asia both the wood and oil are valued for their aromatic properties and also for reputed medicinal powers, useful in treating a wide range of ailments.

Trade in Sandalwood is by law a Government monopoly in India, however current reports indicate that the intensity of poaching in recent years is not only causing significant loss of revenue to the Government, but is reducing stocks of wild-growing Sandalwood to vestigial levels.

Although poaching has apparently 'always' occurred, it has reportedly become both better organized and more intense over the past few years. There is very little Sandalwood in Kerala State, but most poaching in adjacent states, notably Tamil Nadu, is attributed to gangs from Kerala. Unconfirmed reports suggest that the gangs are now financed and organized by relatively prosperous Keralans returning home after working in the oil-rich Gulf States.

The Calicut area of northern Kerala is suspected to be one base for the poachers. In the nearby Nilgiri Hills area it is said that most Sandalwood trees are now cut right to the base, with no shoots left, and even the roots are being dug up. One Forest Department official reportedly awoke one morning to find that all the Sandalwood trees growing inside his compound had been taken during the night. Groups of poachers live mainly off the land while operating, apparently dynamiting streams to obtain fish, and hunting elephants and other animals. It is expected that they will concentrate more on ivory once Sandalwood cutting is no longer feasible.

Much of the Sandalwood collected is thought to be illicitly exported from the west coast port of Calicut. There is also a regular movement up the east coast toward Calcutta for export to Nepal and other places. Officers of the Forest Protection Squad recently seized over 700 kg of Sandalwood packed in deal containers at Madras Central Station, en route to Calcutta. In this particular instance the original booking slip for one 50 kg container had been fraudulently altered to allow for seven containers. The consignment of logs (wetted to avoid the tell-tale scent) was worth over Rs 40,000 (around £ 2,700).

It should be stressed that most Forest Department staff in Sandalwood areas are doing all in their power to restrict poaching, but are severely limited by the lack of

men, money and equipment. Their resolve is demonstrated by the fact that some poachers have already been killed in armed clashes.

Brian Groombridge, Conservation Monitoring Centre.

* Switzerland Seizes Monitors

According to the Swiss Federal Veterinary Office, a shipment of aquarium fish, in transit through Switzerland and originating from Zaire, was seized at the Zurich/Kloten frontier on 15 November 1983. The seizure was made because the continuation of the journey had been delayed and a large number of the fish had perished. In one of the containers, 15 juvenile Nile monitors (*Varanus niloticus* - CITES Appendix II) were discovered, two of which had already died; the remainder of the consignment was seized. On examination of the export documents, it was found that the shipment had been illegally exported from Zaire. The consignment came from Aquafior SPRL, B.P. 9.752, Kinshasa, Zaire and was destined for Dolphin International, PO Box 91081, Los Angeles, USA. The 13 monitors are temporarily being held at the Zoological Gardens, Zurich, where they will remain on loan unless the Government of Zaire will pay for their return to the wild.

Source: Federal Veterinary Office, Switzerland

Musk Farms in China

We have received further information concerning Musk deer *Moschus* spp. farming in China (see Traffic Bulletin V(3/4)). This practice has been carried out in China since 1958 and quite a number of farms have been set up (Zhang Baoliang, 1983) and are spread through the provinces of Chinghai, Szechwan, Shensi, Shansi, Anhwei and Kwangsi-Chuang Autonomous Region (Green, in press). Szechwan is one of the major centres and in 1981 there were four state-run farms and 21 commune-run farms with a total of over 1000 musk deer. There were a further 21 commune-run farms in the Aba-Tibetan Autonomous Prefecture, holding about 400 animals.

References:

Anon 1981:

Zinhua news bulletin.

Zhang Baoliang 1983:

Musk-deer. Their capture, domestication and care according to Chinese experience and methods, *Unisylva* Vol.35, No.139, pp.16-24

Green, M.J.B. in press:

The musk trade, with particular reference to its impact on the Himalayan population of *Moschus chrysogaster*. Paper presented at Bombay nat. Hist. Soc. Centenary Seminar (1983).

Chimps in Japan

Further to our report on the Sierra Leone Chimp trade (See Traffic Bulletin V(3/4)), a reporter in Japan has received confirmation from the Japanese Foreign Ministry that the 30 Chimpanzees (*Pan troglodytes*), imported from Sierra Leone, are in fact being held at the National Institute of Health's research facility in Maruyama, Tokyo

where research on B-type hepatitis vaccine is being undertaken. This contradicts the information previously supplied that the animals were part of a breeding programme being undertaken by the Suzuken Company at their research facility in Kyushuu.

The Foreign Ministry stated that over the past few years, 70 Chimps have been obtained from Sierra Leone and that some of these were at the Suzuken facility for breeding purposes.

Source: *Traffic (Japan)*

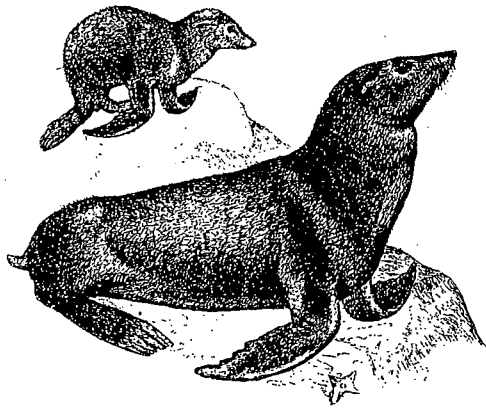
Indiscriminate Slaughter of Sea-Lions

A decree issued by the Government of Chile, has listed the Southern sea lion (*Otaria byronia*) as a "destructive" animal and authorises the killing of those animals which are accustomed to taking fish trapped in fishing nets.

This decree replaces one which necessitated a hunting permit, issued by the National Fishery Service who fixed the number, sex and size of specimens caught, as well as the place, date and methods of capture.

The Subsecretariat of Fishery claims that under this new decree, the species are in no danger of being wiped out as "the killing would be subject to the selective control of the Subsecretariat". This statement, however, contradicts the terms laid down in the decree, which does away with the requirements previously stipulated by the secretariat.

Consequently, as no procedure has been established to determine which sea-lions feed off fishermen's catches, large numbers are allegedly being killed. Chilean conservationists are adamant that if the Subsecretariat is to implement "effective selective control" over indiscriminate killing, the old decree should be re-imposed.



Seal Fur-Dressing Plant to Close

Norway's major seal-skin processing company, G.C. Rieber & Co. AS, has decided to close-down its fur-dressing plant in Bergen, as a result of the widespread campaign against the import of Harp and Hooded seal-pup skins (*Pagophilus groenlandicus* and *Cystophora cristata*) into the EEC and the resulting ban. The Bergen plant has been principally involved in the processing of these skins, and has processed them for the Soviet and Greenland governments as well as for other commercial seal skin dealers.

Sources: *Fur Review*, January 1984.
WTMU files.

Fitz-Roya Trade to Increase?

The decision taken at the CITES Meeting in Botswana (see *Traffic Bulletin* V(2)) to downgrade the Chilean coastal population of the Chilean false larch, *Fitz-Roya cupressoides* (incorrectly spelt in the CITES Appendices listings as *Fitzroya cupressoides*) from Appendix I to Appendix II of CITES is causing concern amongst conservationists. The proposal stemmed from a desire to fell and export timber from dead standing trees, which occur mainly in the coastal ranges, and fears have been expressed that international trade, which is at present limited, will be greatly expanded.

The false larch has been designated a Natural Monument in Chile and felling of live trees is prohibited by decree. For enforcement purposes, however, it will be difficult to distinguish the wood of trees that are long dead or have died naturally from the wood of live-felled trees.

Sources: Sara Oldfield, *Threatened Plants Newsletter* Number 12, November 1983.
WTMU files.



Subscription Increase

PLEASE NOTE: With the next Volume of the *Traffic Bulletin* (Vol. VI), the annual subscription fee will be increased to 14\$.00 (£7.00) per Volume (5 issues). Will all subscribers please ensure that they complete and return the sub form below to WTMU, enclosing the appropriate remittance. This does not apply to those who have already paid for Vol. VI.

NAME _____

ORGANISATION _____

ADDRESS _____

DATE _____

I wish to continue to receive the *Traffic Bulletin*.

I enclose cheque/bank draft/international money order for US\$14/£7.00 per volume, payable to the Conservation Monitoring Centre - 219c Huntingdon Road, Cambridge CB3 0DL, UK.

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 \$14.00 (£7.00) per volume. (For orders of more than one copy, a reduced rate is available).