WILDLIFE TRADE MONITORING UNIT

Traffic Bulletin

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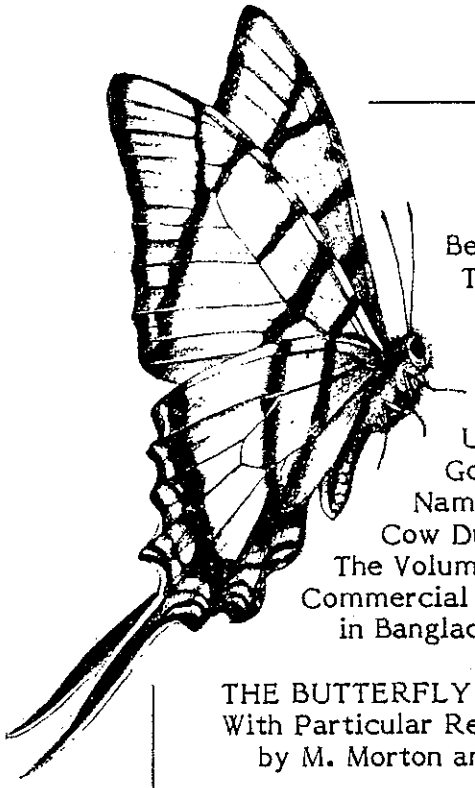

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Benin Joins CITES

Benin has become the 86th member of CITES, acceding to the Convention on 28 February 1984; this will take effect from 28 May 1984.

Threatened Tamarins in Japan

A total of 14 Golden Lion Tamarins (Leontopithecus spp., Appendix I) are known to have been imported into Japan from Guyana between August and November 1983. Three of them, identified as Golden-headed Lion Tamarins (L. rosalia chrysomelas) were re-exported to Hong Kong in September (see Traffic Bulletin V(5/6):51); two others have also been identified as being Golden-headed Lion Tamarins.

Eight specimens reported to be of L. rosalia were imported in August. In October the CITES Management Authority for Japan (MITI) received and approved an application to import a further ten animals. However the Customs statistics for November record the import of only six specimens and the Government has subsequently prohibited the importation of the remaining four. MITI has confirmed to Traffic (Japan) that both shipments came from Guyana and were imported on export documents allegedly issued by the Guyanese Ministry of Agriculture recording the animals as L. rosalia and 'captive-bred'. In March, however, the CITES Management Authority in Guyana officially confirmed to the CITES Secretariat that no export permits had been issued for L. rosalia. During the official visit to Japan, in April 1984, of the Secretary General of CITES, Eugene Lapointe, this matter was discussed with MITI and it is still under investigation.

The fate in Japan of five specimens has been verified: a pair of L. r. chrysomelas was sold to the Japan Monkey Center in November 1983 by Yoshikawa Shokai (also known to trade under the name of Isejima Zoo). The purchase was made because, according to a contact at the Center, it was felt that the individuals would die if left to the dealer. In December, two specimens, subspecies unknown, were received by Nihon Daira Zoo in Shizuoka from the same dealer, however one later died and a replacement was bought to make up a pair. Traffic (Japan) contacted Yoshikawa Shokai and was told that they had imported Lion Headed Tamarins "over the summer, in July or August", that it had taken over a year to secure them and that they had all been sold to zoos. The numbers involved were not revealed.

The whereabouts of the remaining six is not known.

Traffic (Japan)
CITES Secretariat

Traffic (Germany) Exhibition

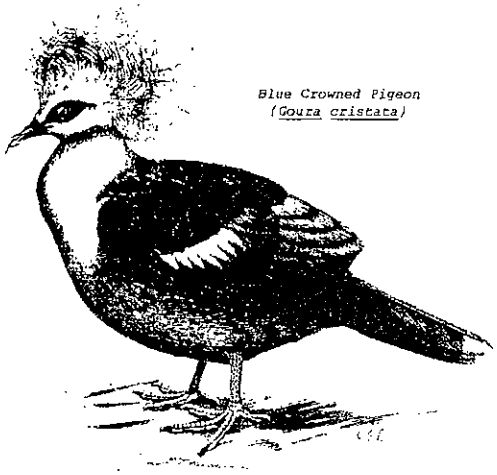
An exhibition set up by Traffic (Germany) was opened at Frankfurt Airport on October 19, 1983 on the occasion of the 20th Anniversary of World Wildlife Fund (Germany) and the 10th Anniversary of CITES. The exhibition, which consists of 50 display-boards with a variety of confiscated CITES goods, has been funded by WWF (Germany), the Federal Ministry of Agriculture, the Bank of Commerce (Commerzbank AG), the German Fur Trade & Furriers Association and the Hessian Foundation for Nature Conservation. After two months at Frankfurt Airport, the exhibition was shown at the Alexander Koenig Museum of Natural History at Bonn until March; it is now on a tour of other West German cities.

Traffic (Germany)

Bird Traders Fined

Further to our report in Traffic Bulletin V(3/4):49 concerning the seizures of 124 rare and endangered birds in Singapore, we can report that the trader responsible has been fined SG$6550. The offender, who was caught in possession of 100 Palm Cockatoos (Probosciger aterrimus), 21 Moluccan Cockatoos (Cacatua moluccensis), two Brahminy Kites (Haliastur indus) and a Blue Crowned Pigeon (Goura cristata) (all CITES Appendix II species), faced four charges preferred against him under the Wild Animals & Birds Act. Each offence carries a maximum fine of SG$1000. The birds were believed to be worth SG$112 350.

The Palm and Moluccan Cockatoos are reported to have died, and it is believed that the Brahminy Kites and Blue Crowned Pigeon which had been sent to Jurong Bird Park, have also died.



Blue Crowned Pigeon (Goura cristata)

Five Indonesian barter traders have each been fined SG$8500 for importing 34 Blue Crowned Pigeons into Singapore. Originally there had been 100 birds but only 34 were alive when the shipment was intercepted and these have been sent to Jurong Bird Park. The Blue Crowned Pigeon, which is endemic to Irian Jaya and nearby coastal islands, in New Guinea, is protected under Singapore's Wild Animals & Birds Act.

* * * * *

In the United States, 104 Palm Cockatoos and 28 Eclectus Parrots (Eclectus roratus, Appendix II) originating in Indonesia and shipped via Singapore, have been confiscated (see Traffic Bulletin V(3/4):49). This confiscation has taken place under the US Lacey Act which prohibits the importation of wildlife illegally exported from another country. The importers, Anna Marie's Inc., a wholesale wildlife business in Fort Lauderdale, Florida, imported 100 of the Palm Cockatoos and the 28 Parrots at Miami on September 25, 1983 and had valued the birds at US$700 000. The firm had previously imported the four other Cockatoos at Los Angeles. The US Fish and Wildlife Service, which claim this to be the largest importation of Palm Cockatoos ever known to have been made into the US, has taken possession of the birds and they are being cared for in zoos.

The Straits Times, 26.11/9.12.83
Department of the Interior News Release 29.2.84

European Hunting Examination ?

A meeting held in September 1983 by the Council of Europe has recommended that member States which do not already do so, incorporate in their legislation the requirements for a hunting examination. It was also proposed that a code of conduct for hunters be drawn up. A further meeting to decide on these recommendations is to be held in May.

Council of Europe - Environment and Natural Resources Division

UK List of Vicuna Stocks

The following is a list of pre-Convention Vicuna cloth or wool products held by 29 stockists in the UK as recorded by the Department of the Environment. Each time a trader has applied to import or export a Vicuna-related product, DoE has requested his stock details. Occasionally updated information has been requested.

Also included in the list are amounts held by stockists not involved in import and export; however, the dealers are not obliged to provide information, therefore there may well be amounts held in the UK which are not recorded, and also stocks which may have passed on to other traders within the UK.

Each horizontal line below refers to the amounts held by a single dealer.

Vicuna UK Stock Levels
January 1981 & June 1983

Stock (kg) Jan 1981	Stock Level June 1983 (kg)			
	Hair	Cloth	Yarn	Total
4.71	-	-	-	-
8.28		8.28	-	8.28
-		6.08	-	6.08
-		-	-	-
1.31		1.31	-	1.31
-		-	-	-
-	7.50	-	-	7.50
-	-	1.76	-	1.76
1432.00	1130.00	3.90	1.49	1135.39
	-	0.20	-	0.20
-	-	0.25	-	0.25
0.70	-	-	-	-
-	-	-	-	-
11.93	7.00	-	8.90	15.90
-	-	-	-	-
0.75	-	0.06	-	0.06
-	-	9.99	-	9.99
1.83	-	-	-	-
10.50	-	7.11	-	7.11
0.10	-	0.55	-	0.55
-	-	-	0.24	0.24
3.08	-	-	-	-
1.12	-	0.65	-	0.65
9.00	-	-	8.86	8.86
1.33	-	31.59	-	31.59
-	-	-	3.20	3.20
42.12	-	35.49	-	35.49
5.00	-	-	5.00	5.00
109.32	-	0.42	-	0.42
1643.08	1144.50	107.64	27.69	1279.83

UK Restricts Bird Imports

Following an outbreak of Newcastle disease in the UK, the importation of birds was prohibited and the granting of licences suspended on 6 February 1984. However, for some reason, the restrictions do not apply to family pets or to performing birds.

Ministers have since decided to permit a resumption of imports from those countries which have agreed to provide additional certification by an official veterinarian stating that the birds have been hatched and reared in their territory; appropriate quarantine premises of suitable standards must also be available. With effect from 22 March, imports of birds, subject to appropriate certification, will be allowed from the USA, Belgium and New Zealand and from 28 March, from Denmark, Norway, Switzerland and Finland.

As a result of the outbreak, thousands of birds in quarantine (mostly budgerigars, canaries and parrots) had to be destroyed.

Ministry of Agriculture Fisheries and Food, UK
Cage & Aviary Birds, 7.4.84

Gorilla Sale Opposed

A major dispute has been growing over the proposed export from Cameroon of seven young Gorillas (Gorilla gorilla, CITES Appendix I). The animals, all between four and seven years old, are in the possession of Mr and Mrs Robert Roy in Sangmelima, Cameroon, who are known to have been dealers in the past. Five other Gorillas held by the Roys were exported to France in 1980. They now plan to export the remaining seven to the USA through a company called Zoo Fauna of Miami, Florida, whose proprietor, Matthew Block appears to be the 'middleman' in this deal.

A number of conservation and welfare organisations have objected to the transaction, including World Wildlife Fund (US) and the International Primate Protection League (IPPL), and considerable press coverage has resulted in the USA.

In November 1983, during an official visit to the United Republic of Cameroon, Jaques Berney, Assistant Secretary General of the CITES Secretariat, together with officials of the CITES Management Authority for Cameroon, visited the premises of the Roys to inspect the Gorillas and discuss their fate. Therefore, as a result of the controversy, the Secretariat has issued a Position Statement. This makes clear that the Secretariat has not approved nor supported any commercial use of the seven Gorillas and has recommended that no import permit be issued if the transaction appears "to involve commercial advantages for any middleman".

The Roys do wish to recover the cost of having reared the Gorillas from a very young age (apparently they were orphaned by the killing of their mothers for meat). Memphis Zoological Gardens, North Carolina Zoological Park and Columbus Zoo have all applied for permits to import animals from the group, and several US newspapers report that zoos have made offers to Matthew Block in excess of US$70 000 for each animal. Thus, a total of at least $490 000 could be paid for the animals. This sum would do rather more than pay the Roys' costs.

However, the CITES Secretariat is satisfied that: the Roys are not animal traders now and have not been for several years; there is no evidence available to suggest that the Roys' activities have been illegal or contrary to CITES and the seven Gorillas were all legally acquired prior to the Convention entering into force in Cameroon (on 3 September 1981). On this basis, Cameroon's CITES Management Authority is reportedly prepared to issue an export permit for the animals. ►

► Indeed, a permit for the export of five of the animals, to Poland, was issued last year. The shipment never took place and the permit is no longer valid.

The CITES Secretariat states that the Roys are not able to afford to keep the Gorillas much longer, that they cannot be released to the wild and that there are no facilities for keeping them captive in Cameroon. It is therefore suggested that the animals go to an institution (or institutions) "within the framework of a well managed captive breeding programme" or to a suitably equipped facility within the natural range of the species.

This latter suggestion is favoured by many conservationists who are concerned to prevent the entry into commerce of the seven animals, and to preclude the possible stimulation of illicit trade that might result. If the Gorillas cannot be returned to the wild, an African holding or breeding facility could serve a valuable educational function for the local people who might normally view the creatures as a source of food.

Concern over commercial Gorilla trade is increasing. Japan's annual report to CITES for 1982 records imports of two Gorillas from Cameroon for scientific purposes and two from Spain, allegedly captive-bred in Guinea. More recently Granby Zoo, Canada, imported a very young animal from Benjamin Onana, a dealer in Cameroon, in January 1984.

CITES Secretariat
International Primate Protection League
(23.2/1.3.84).
A.H. Harcourt (24.2.84)
Miami Herald (21.1.84)
Columbus Citizen Journal (15.2.84)
Monitor (9.3.84)

Namibia Sells Ivory/Rhino Products

On 15 June 1983, the Department of Agriculture and Nature Conservation in South West Africa/Namibia, sold 99 kg of rhino horn by sealed tender. The rhino horn sold for R500 per kg in comparison to R376 per kilo fetched in 1982. Eight rhino feet sold for R8 each. A stock of 50 kg of rhino horn remains in the Department's possession.

In addition, about 1150 kg of ivory achieved an average of R56 per kilo - R10 more than the price obtained last year.

Dept. of Agriculture and Nature Conservation
SWA/Namibia

Natswa News, November 1983, No. 2

Cow Dung for Sale!

Fake rhino horns bearing a remarkable resemblance to the real thing are being produced in Southern Africa from resin, cow hair and cow dung. On at least two occasions in 1983, prospective rhino horn buyers in Zambia were offered fakes, totalling six. Reporting on this, the Save The Rhino Trust Newsletter (December 1983) remarks that the purchasers seized all the horn on both occasions and, in one case, the merchant! The prices asked were up to K150 (£64.00).

The Volume of the World's Trade in Rhino Horn

by Esmond Bradley Martin and Jonathan Barzdo

Since 1970 the world's population of rhinos has fallen by 70%, not only because of the increasing pressures of habitat disturbance but perhaps more particularly because of the pressures of trade.

From 1970 to 1979 the wholesale price of African rhino horn escalated from US$30 to $500 a kilo. In the same period the cost of Asian rhino horn soared from $1 400 to $8 000.

Asian rhino horn became so valuable because of its scarcity and an increased demand for it as a fever-reducing drug in South-East Asia which was experiencing an economic boom. However, the cost of African horn rocketed primarily because of a huge demand for it from a country which had hitherto consumed only small amounts.

An investigative study by Esmond Bradley Martin in 1978 showed that North Yemen had become the greatest consumer of rhino horn in the 1970s, importing approximately 40% of the world's total consumption, for the purpose of making dagger handles. In October 1983 he went to North Yemen again to up-date his study of the country's rhino horn demand. The information he gathered comes mainly from traders who deal in rhino horn.

Between 1973 and 1978 North Yemen imported an annual average of 3000 kilos of rhino horn, but that amount fell to a yearly average of about 1675 kilos from 1979 to 1982.

From 1972 to 1978 it appears that an average of approximately eight tonnes of rhino horn came onto the world market. For each of the years 1979 and 1980 however, the total was about four and a half tonnes.

In 1981 and 1982 this dropped to about two tonnes, and North Yemen's intake had increased to over 50% of what was available. Morever, due to competition among buyers for the North Yemen sales, the wholesale price of African horn rose from $500 in 1982 to $700 in 1983. This 40% increase in just one year will put greater pressure on the estimated 13 000 Black Rhinos and 3100 White Rhinos remaining in Africa.

Below are the official import statistics for rhino horn into Japan, South Korea and Taiwan since 1979. A few comments on these are in order.

In August 1980 Japan ratified CITES and there have been no legal imports since then. The figures for South Korea are misleading because they represent only part of the picture. There were several hundred additional kilos coming into the country during each of the years shown, obtained by Korean smugglers who bought supplies from Hong Kong. Missing, of course, are official statistics from two major rhino horn consuming countries, North Yemen and mainland China; commercial imports there are now illegal. The world's total consumption of rhino horn can therefore only be estimated.

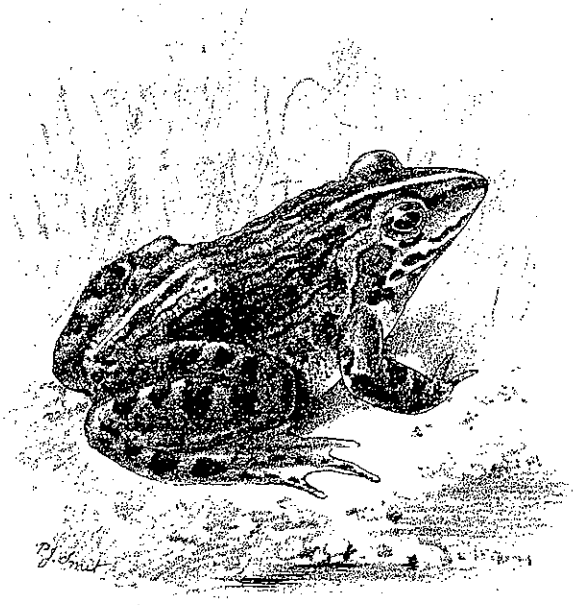
In the future it is extremely unlikely that eight tonnes of rhino horn will again reach the international market in any one year. There may not be enough rhinos left to supply such an amount. Indeed, unless the demands of rhino horn consumers are lowered and imports into North Yemen, China, South Korea, Taiwan and Singapore drastically cut, some populations of rhinos are likely to disappear altogether.

Imports of Rhino Horn into Japan, South Korea and Taiwan from 1979 to 1983

Importing Country	Year	Country of Consignment	Total Quantity in kilos	Total Value (US$)	Average Price per kilo (US$)
JAPAN	1979	Kenya	234	66629	285
		S. Africa	68	29062	427
		Zambia	55	26153	476
		total:	357	121844	341
	1980	Kenya	7	4597	657
		S. Africa	587	223350	380
		China	106	37779	356
		Hong Kong	15	5673	378
		Zambia	48	20699	431
		total:	763	292098	383
	1981	(nil)			
	1982	(nil)			
	1983*	(nil)			
SOUTH KOREA	1979	Malaysia	30	10900	363
		Indonesia	208	69331	333
		Thailand	40	14229	356
		Burma	20	11593	580
		India	20	6775	339
		total:	318	112828	355
	1980	Indonesia	93	41402	445
		Japan	89	14230	160
		Malaysia	21	7632	363
		Burma	10	4969	497
		Thailand	4	2585	646
		total:	217	70818	326
	1981	Indonesia	127	68311	538
		China	10	4333	433
		Hong Kong	5	2563	513
		total:	142	75207	530
	1982	Indonesia	200	102439	512
		Kenya	35	15870	453
		Japan	28	17498	625
		total:	263	135807	516
TAIWAN	1979	Hong Kong	170	28969	170
		S. Africa	11	4893	445
		Other countries	38	6339	167
		total:	219	40201	184
	1980	S. Africa	55	24284	442
		Singapore	2	2949	1475
		total:	57	27233	478
	1981	S. Africa	47	22357	476
	1982	S. Africa	71	9675	136
		Indonesia	4	525	131
		total:	75	10200	136
	1983**	S. Africa	117	76838	657

Sources: Japan Tariff Association, Japan Exports and Imports; Commodity by Country, Tokyo: various years. Republic of Korea, Statistical Yearbook of Foreign Trade, Office of Customs Administration, Seoul: various years. Chinese Maritime Customs, Statistical Series, No.1, The Trade of China (Taiwan District), compiled and published by the Statistical Department, Inspectorate General of Customs, Taipei: various years.

* to November ** Inspectorate General of Customs, In litt., 3.3.84.



Indian Bullfrog (Rana tigrina)

Commercial Exploitation of the Indian Bullfrog in Bangladesh

The Indian Bullfrog Rana tigrina is widely distributed throughout the sub-continent of India and south-east Asia and occurs in all districts of Bangladesh, the greatest densities there occurring in the Districts of Mymensingh and Sylhet. Apart from consumption by indigenous and aboriginal people, all R. tigrina removed from the wild are destined for export.

A report by Professor Charles M. Fugler (1983), on the exploitation of this species, has recently been published and is the source of the following information.

The collecting of R. tigrina is an economically valuable activity and generates significant employment. At least one village in the District of Mymensingh depends on the capture and sale of this species and of various freshwater turtles for its livelihood. According to the report by Prof. Fugler, the foreign exchange earned by the export of frogs' legs from July 1975 - January 1976, was Taka 6 474 434 (approx. US$359 000). For the years 1977-81 inclusive, a minimum of 9 744 559 pounds of processed frogs' legs were exported from Bangladesh at a value of US$14 601 904 minimally (see table below). Processed hind-limbs are exported to Japan, US and many European countries.

Because of this commercial exploitation, wild populations of R. tigrina are becoming rapidly depleted, especially in Sylhet and Mymensingh Districts (which account for 80% of all R. tigrina taken within Bangladesh) and its present status is giving rise for concern. Apart from the harmful effects continued exploitation might have on its populations, there is a risk that uncontrolled harvesting of R. tigrina may have a disastrous effect on rice fields and wetlands, where this species protects valuable crops by devouring destructive insects.

A ban on collecting during the breeding season is enforced from 15 April-15 May; however this is easily and frequently contravened. Besides, field data suggest that the breeding season can extend beyond July. No other provisions exist for the control of this exploitation. Professor Fugler suggests various protective strategies that should be adopted: to ban the exploitation of wild stocks in the Districts of Mymensingh, Sylhet and Chittagong for a minimal period of two years and in alternate years thereafter in order to allow populations to recover; to divide the country into areas or zones where collecting would be permitted in alternate or every two years; or to ban all exploitation of the natural populations through two reproductive seasons, an approach similar to that already enforced in India.

Attempts at captive-breeding of R. tigrina are to be recommended but have so far proved unsuccessful.

Monthly Export from Bangladesh of Processed Frog Legs (in lbs) 1977-81
(All annual totals except 1979 are minimum figures).

	1977	1978	1979	1980	1981
Jan	N/A	3080	776720	20120	40090
Feb	N/A	2000	45300	N/A	N/A
Mar	N/A	N/A	42800	N/A	37640
Apr	N/A	N/A	37920	N/A	N/A
May	56750	102280	4060	N/A	N/A
Jun	90320	N/A	12000	45210	N/A
Jul	98748	874382	341256	118754	378520
Aug	135784	127866	101400	179720	870590
Sep	N/A	759333	27160	342440	633015
Oct	274400	505552	103600	378390	474070
Nov	121240	N/A	181240	149500	95920
Dec	42440	234375	501990	253894	122690
Total Weight (lbs) Exported:	819,682	2,608,868	2,175,446	1,488,028	2,652,535
US$ Value:	1,229,523	3,913,302	3,263,169	2,217,108	3,978,802

N/A: Not available.
Source: Fugler, Charles M. The Status of Population of Rana tigrina Daudin in Bangladesh, Bangladesh Fisheries Resources Survey System BGD/79/015, Fisheries Information Bulletin, 1(4):1-51, (June 1983), Dhaka, Bangladesh.

The Butterfly Trade:

With Particular Reference to the Papilionidae

by M. Morton and N.M. Collins

The worldwide trade in butterflies is big business, running into tens of millions of dollars annually. In this article we take a look at the main areas of commercial interest and ask whether the trade is likely to damage wild populations in a severe or permanent way. All prices quoted are in US dollars.

Introduction

Butterfly collecting began in the 16th and 17th centuries when large numbers of new and exotic species were brought back by explorers to be described, classified and studied by the scientists of the day. It evolved into a popular hobby during the nineteenth century, pursued by educated aristocrats, middle-class laymen, doctors and clergymen who had the necessary money and time to spare. Some of these became leading authorities on the subject.

The current trade supplies specimens to scientists, museums and private collectors, eliminating their need to travel long distances. Dealers' lists advertise a huge range of butterflies and other insects. Swallowtails range from the common Oriental and Australasian Graphium sarpedon (Blue Triangle or Common Bluebottle Butterfly) and the Brazilian Eurytides stenodesmus at $0.30 to the rare Ornithoptera goliath supremus (Goliath Birdwing) from New Guinea for $750 a pair. In most cases the prices are correlated with rarity. The highest price ever paid was in 1966 when a male Ornithoptera allottei (Abbé Allottes Birdwing) from Bougainville was sold for the equivalent of about $1500 at an auction in Paris (25). O. allottei is only known from about twelve specimens and is thought to be a natural hybrid between O. victoriae regis (Queen Victoria's Birdwing) and O. priamus urvillianus (Priam's Birdwing)(6).

High prices may also be paid for species which are fairly widely distributed but rare and difficult to obtain. In the foothills of the Himalaya mountains Teinopalpus imperialis (Kaiser-I-Hind Butterfly) is difficult to capture since it is a strong flyer which keeps to the tree tops. In 1955 a collector paid the equivalent of about $250 for a single specimen (25), and they now cost about $75 a pair. Species from inaccessible countries rarely appear on the market and when they do they tend to have high price tags. For example, a pair of Bhutanitis thaidina from China was advertised by a West German dealer in 1983 for the equivalent of about $225.

Some collectors will go to extreme lengths to obtain rarities, either for their own collections or for sale at a profit. The high prices paid for butterflies in recent years have attracted investors interested only in quick returns (3), with little or no thought for the insects in the wild. The largest and one of the rarest butterflies in the world, Ornithoptera alexandrae (Queen Alexandra's Birdwing) of Papua New Guinea, is mainly threatened by deforestation but collecting was at one time also a problem. Since 1968 it has been illegal to collect this species but until recently there was an active smuggling ring reputedly earning as much as $800 per specimen and over $200 000 annually (11). With Ornithoptera allottei now believed to be a hybrid, Ornithoptera alexandrae has probably replaced it as the world's most valuable species. It has been estimated that fine specimens could be worth between $1800 and $2000 (5,22). Commercial collecting by expatriates has now been stopped completely, several people having been deported from Papua New Guinea for smuggling (11). Ornithoptera alexandrae and some other rare, valuable and coveted species are seriously endangered, although not necessarily by trade alone, and are to be reviewed in the forthcoming IUCN Swallowtail Red Data Book. These include Papilio hospiton (Corsican Swallowtail) from Corsica and Sardinia, Papilio homerus (Homerus Swallowtail) from Jamaica, a female of which was advertised in West Germany in 1983 for about $500, and the uncommon Malagasy species Papilio morondavana, females of which are frequently advertised by French dealers for about $120 to $150.

There are essentially three different sorts of trade:-

(i) Low value, high volume. Large numbers of common species, often of lower quality, are used in a range of ornaments and decorations. The trade of Taiwan is typical of this category, with annual sales estimated at 15-500 million butterflies (18).

(ii) High value, low volume. High quality specimens, sometimes with scientific data including date and place of capture, are sold to museums, students and collectors. Many dealers in Europe, North America and Japan produce catalogues of specimens in this category. Trade from the insect farming programme of Papua New Guinea is at the top end of this market (10,17).

(iii) High value, high quality ornamental items. This includes wall-mounts and glass domes containing mounted butterflies in life-like settings, or jewellery such as that based on the iridescent butterfly Morpho menelaus (Blue Morpho) of Brazil.

The main producing countries are in the tropics where there is a diverse range of beautiful species.

COUNTRIES OF ORIGIN

The Orient

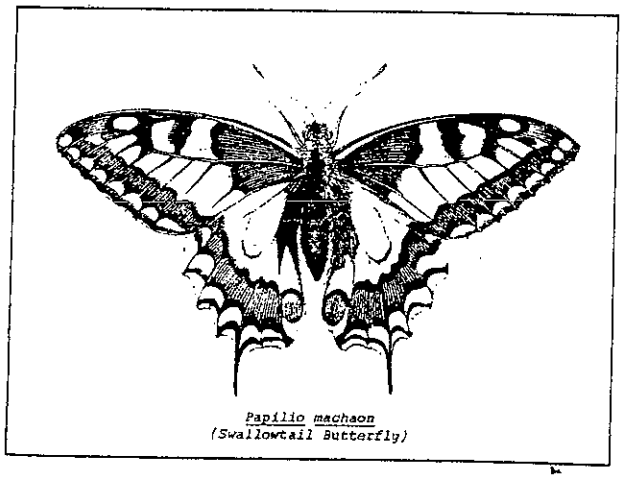
The Oriental region contains an extremely diverse butterfly fauna. The major threat in the region is loss of habitat resulting from deforestation, agriculture and urbanization. In most areas collecting is small-scale and opportunistic, often by Japanese collectors, but there are large-scale international trading centres in Taiwan and Malaysia, and significant commercial enterprises in Hong Kong and Korea (18).

Taiwan has a butterfly trade which operates on a vast scale involving about 20 000 people including approximately 10 000 mainly freelance collectors (11,14,23). Estimates of the number of butterflies traded annually vary from 15 to 500 million (18). Virtually all butterflies are caught in the wild and sold to the 30 or so factories which process them (14,23). Many species are imported in bulk from overseas, particularly Morpho species from Brazil, Charaxes from Africa and birdwings from South East Asia. The bodies are discarded for pig feed and the wings are glued to paper bodies with bristle antennae and laminated between sheets of clear plastic. They are then used to make bookmarkers, coasters, table mats, wall decorations and even plastic toilet seats! Others are made into pictures or used to decorate handbags or purses. Taiwan's export trade was valued at $30 million in 1969 (11) and about $21 million (£12 million) in 1976 (12).

Individual specimens are also sold by a number of dealers in Taiwan, where prices vary according to rarity, size and beauty, from about $0.02 for a specimen of the

endemic Papilio machaon sylvina to $45 for the endemic Papilio elwesi maraho. Males of P. e. maraho were advertised in 1983 by a German dealer for the equivalent of about $75. Although an island with an area of only 35 960 km^2, Taiwan has about 400 butterfly and moth species of which 40 are endemic (14). About 100 species, including 20 crop pests, need no protection, while the remaining 300 need some form of management (14). Between 50 and 60 of these are very rare (14). There are no captive-breeding programmes although a few people rear rare papilionids and Attacus atlas (the Atlas Moth) to obtain quality specimens for collectors (14). There has so far been no conclusive evidence that the butterfly industry poses a threat to the majority of butterfly species. The major threat to Taiwan's butterflies comes from urbanization, habitat destruction, air pollution and pesticides. There is apparently no environmental legislation in Taiwan. So far there are also no laws to ensure rational exploitation and long term survival of the butterfly industry (11,14,18,20,23). The import of specimens to Taiwan from overseas has never been measured and it is not known what effect the market has in the countries of origin. More research is needed to assess what proportion of the Taiwan trade is in foreign species, and the impact caused by the demand.

Large numbers of Trogonoptera brookiana (Rajah Brooke's Birdwing) are exported from Malaysia (16). There is evidence that the trade exceeds 125 000 specimens annually, all of which are collected in the wild. Under Malaysian law the species is "protected" but not "totally protected", and collecting is permissible with an easily obtained permit. The species is also listed on Appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) but there is evidence that most exports are unlicensed. Many dealers listed Trogonoptera brookiana in 1983, often for sale in bulk quantities. Batches of 100 from a West German dealer were offered for about $20 and in the USA one dealer was selling 100 for $30. The main threat to Trogonoptera brookiana and other Malaysian butterflies is habitat destruction rather than trade. Nevertheless, the trade should be carefully monitored since the population may be brought to such a low level by loss of habitat that a continuation of heavy collecting could be a serious threat (16).



Papilio machaon
(Swallowtail Butterfly)

In South Korea the decline in populations of species such as Parnassius bremeri, Papilio demetrius, P. machaon (Swallowtail Butterfly) and P. macilentus has been partly attributed to over-collection (13). There is no information on trade in the Philippines and Indonesia although collecting by tourists and private collectors is said to be affecting some species, including the endangered Papilio chikae in Luzon (21). Indonesia has legislation protecting certain species, mainly birdwings, but it is not known how effective this has been. Some of the species are often advertised in dealers' lists. In 1980 the Government of India passed an amendment to the 1972 Wildlife Protection Act listing a large number of butterflies. There are two large commercial "farms" in the country which have apparently been affected by this legislation but it is thought that neither had a captive-breeding programme. The Indian Government is interested in setting up a farming project for common species and two trial farms are planned, for north-western and eastern India.

Australasia

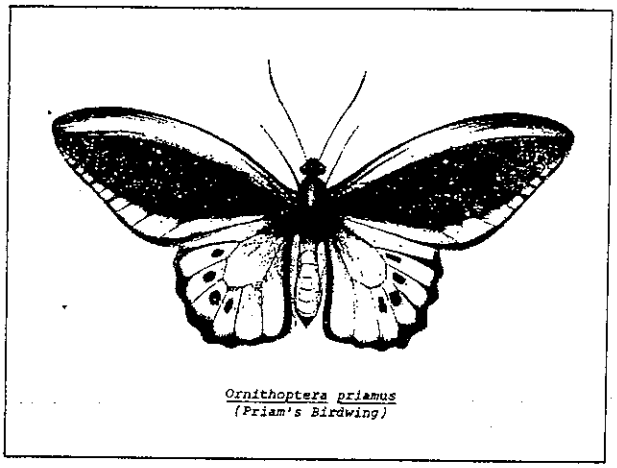
Papua New Guinea probably runs the best example of a high value, low volume trade, exporting high quality specimens of native butterflies. The spectacular birdwings of the genus Ornithoptera are the greatest attraction for collectors and an important natural resource for the country. Mainly because of habitat destruction, but aided by collecting, some species have become very rare, in particular Ornithoptera alexandrae. In 1968 the seven rarest Ornithoptera species, i.e. alexandrae, allottei, chimaera (Chimaera), goliath, meridionalis, paradisea (Paradise) and victoriae were protected by a national law to prevent collecting (2).

Before Papua New Guinea's independence, in 1975, all collecting was carried out for expatriate dealers by native collectors. They often received as little as $0.20 for butterflies which could fetch up to $250 overseas (5). Since independence, only nationals have been permitted to profit from the trade, which is now co-ordinated by the Insect Farming and Trading Agency (IFTA) at Bulolo. Villagers are encouraged to ranch or collect the commoner unprotected species such as Ornithoptera priamus and Troides oblongomaculatus. By 1978 over 500 people were involved in this rapidly expanding village industry. All business is handled by IFTA which pays the villagers all profits less 25%. There has been an increase in the trade in quality specimens from Papua New Guinea. In 1979 villagers were being paid $37 for a box of butterflies but by 1980 this had risen to $50 (2). A hard-working butterfly rancher may earn up to $1200 annually (2). By 1983 the annual trade in insects, mainly butterflies, was estimated to be $110 000 and increasing. Approximately 30% of specimens reaching the Agency are ranched and the rest are collected as adults in the wild, but 50% of the revenue comes from the usually better quality ranched specimens (2).

Ranching is widely encouraged by IFTA because it produces fresh undamaged specimens and is also a good conservation measure. Under this practice only the pupae are kept in captivity. Butterflies are free to come and go and the rancher ensures that a proportion is released to continue the cycle. Children and potential ranchers are shown which species can easily be ranched, and which plants are attractive as food or for nectar. An average ranch will have a garden of about 0.2 hectares surrounded by a thick hedge of Hibiscus, Bougainvillea or similar nectar-bearing plants. These attract the butterflies but also keep out livestock. Foodplants cultivated inside the fence include the foodplant of the common birdwings, the common Aristolochia tagala (Dutchman's Pipe Vine), upon which the larvae feed and pupate. The pupae are removed and placed into an emergence cage just before the adult emerges. The ranchers are taught how to judge the correct time and also how to kill and pack into boxes the newly emerged butterflies (2,10,17,19,22).

A large number of other Papuan butterflies are collected as adults but these tend to be mainly common species such as Graphium sarpedon and G. agamemnon (Tailed Jay or Green-spotted Triangle Butterfly). Adult Graphium weiskei (Purple-spotted Swallowtail) are

collected because the foodplant is unknown. It may be common in some areas but occasionally collection has to be halted for anything up to a year whilst the numbers increase (19). Ornithoptera victoriae is common on Bougainville and IFTA may in future recommend its removal from the protected list in order to allow ranching. O. chimaera and O. goliath have also been suggested as good candidates for future ranching projects although their foodplants are more difficult to cultivate. As well as being a valuable village industry in Papua New Guinea, the butterfly ranching project demonstrates that butterfly trade and conservation can be of mutual benefit (19) and the future looks promising for both the trade and the ranching programme.



Ornithoptera priamus
(Priam's Birdwing)

Africa

Large numbers of African Charaxes (Nymphalidae), Papilio and other genera appear on dealers' lists. Many are only listed as being from Africa, West Africa or East Africa, but the Central African Republic, Madagascar, Malawi and to a lesser extent Congo and Gabon seem to be regular suppliers. Malawi is chiefly a source of Charaxes species, whereas both Central African Republic and Madagascar appear to be suppliers of a wide range of butterflies.

Reports from the Central African Republic indicate that, for the past fifteen years, hundreds of thousands of butterflies each year have been indiscriminately caught by hundreds of local collectors for sale overseas. Collecting of this sort includes large numbers of females and could have a harmful effect on some species or populations. More information is needed from this and other African countries. Some nations would benefit from a farming/ranching scheme, particularly for Papilio and Charaxes species.

Madagascar is well known for its unique and endemic fauna, including many butterflies. There is no commercial ranching and specimens are caught by local collectors for expatriate dealers. The collectors are usually untrained and are only interested in large numbers of different species. The resulting indiscriminate collecting may be highly destructive and wasteful since many specimens are damaged and later discarded. Female Papilio morondavana, a large black and yellow swallowtail, can command prices up to $150. Other valuable Malagasy species are Papilio grosesmithi, P. mangoura, and Graphium evombar. Specimens from Madagascar are subject to a heavy export tax but the fact that some species are common and cheap on many dealers' lists may indicate large-scale smuggling.

The African species commanding the highest prices are generally large and spectacular such as Papilio antimachus (African Giant Swallowtail) ($20 for a male in 1983 in the USA) and Papilio zalmoxis (Giant Blue Swallowtail) ($10-15 in 1983 in the USA). Collecting is normally done by natives for overseas dealers. There is no legislation except in Kenya, where a permit is required to collect Lepidoptera and Coleoptera.

South and Central America

Butterfly "farms" exist in Costa Rica and some species of Morpho (Morphidae) may be "farmed" in Brazil (2). These beautiful iridescent blue butterflies are much in demand for high quality jewellery and other purposes and 50 million a year are captured in Brazil alone (4,18). Although the law requires that morphos in trade must have been "farmed", there is much evidence that the bulk of the trade is in wild-caught specimens (2). Survey work is needed to assess the impact of this trade. Butterflies originating in Colombia, Costa Rica, Ecuador, Peru and Mexico are also not uncommon on dealers' lists. In Honduras there is a low value, high volume trade similar to that in Taiwan, but on a smaller scale (18).

North Temperate Regions

In general the trade in temperate species is for serious collectors rather than the ornamental market.

Butterflies of the Palearctic region are often in demand and although some farms and ranches exist, most species are collected in the field. Eastern Palearctic species are particularly difficult to obtain and China has species of Papilio and Parnassius that would be suitable for farming or ranching (18). The Nearctic region is similar, the considerable demand being met largely from wild-caught specimens.

BUTTERFLY TRADE AND CONSERVATION

The impact of private collectors

The major threat to butterflies is loss of habitat caused by the actions of humans (24). Urbanization, deforestation, overgrazing, agricultural intensification, expansion of subsistence agriculture and atmospheric pollution all take their toll. Nevertheless, there are circumstances in which private collectors can have a serious impact, notably when populations are already severely reduced by other factors, and when populations or species are on the edge of their range (15).

Such was probably the fate of Lycaena dispar (the Large Copper), which became extinct in Britain, on the edge of its range, in 1847/8. Habitat destruction by drainage was the main cause of its demise, but collectors may have dealt the final blow. More recently Canadian naturalists have been concerned over an increase in butterfly collecting in the Great Lakes area. Species already threatened by habitat loss and pollution have become the target of collectors interested in their increased rarity value. One pierid is endangered and now protected in Ontario (1).

Even butterflies with a seemingly wide range may have vulnerable isolated populations with slight pattern variations coveted by collectors. In 1926 a collector tried to wipe out an entire local population of Parnassius apollo (Apollo Butterfly) in the Italian Alps to increase the value of specimens already possessed.

Recently some other examples of irresponsible

exploitation by collectors have come to light. In the Far East, Japanese collectors are particularly implicated. Package tours to collect butterflies have been accused of causing serious reductions in the butterfly populations of some areas of the Himalayas (8). In Luzon, Japanese collectors have been known to offer cameras for specimens of Papilio chikae, a beautiful iridescent swallowtail (7). A female specimen on a West German dealer's list in 1983 was offered for the equivalent of about $150.

There is a danger that collectors may be unable to recognize when they are depleting butterfly stocks below the threshold of recovery. Many species of butterfly can reproduce exponentially if conditions are right, but they may also decrease exponentially when conditions are bad. This means that a seemingly common species may very suddenly plummet into rarity or even extinction.

The impact of commercial collectors

Given suitable conditions and sufficient resources most butterflies are probably able to reproduce sufficiently to prevent permanent reduction of their populations by collectors. However, the evidence that millions of specimens are now involved in the international trade in ornaments is disturbing. In Taiwan, the butterfly populations are reputedly remaining constant despite the enormous pressure on them (14,18), but there is a need for an independent assessment. Similarly the main collecting centres in Brazil and Africa require further research, not only to protect the butterflies, but also to ensure long-term rational utilization of the resources that are the livelihood of many people.

Island species or populations are often particularly vulnerable to excessive collecting as well as habitat destruction. For example, the giant birdwings of Papua New Guinea, Indonesia and the Solomon Islands generally lay no more than 30 eggs per generation. In such cases trade does need to be controlled and in Papua New Guinea the butterfly ranching programme is a good example of how this can be done successfully. However, even the Papuans have had their problems. A few years ago a butterfly dealer visited the island of Nimoa, south-east of Papua New Guinea, and asked villagers to collect hundreds of adults and chrysalids of the spectacular birdwing Ornithoptera priamus caelestis, endemic to the Louisiade Archipelago (6). The villagers were paid one Australian dollar per specimen for a haul of several hundred butterflies worth about $5000 (18). Not only were the villagers exploited, but no more birdwings were seen in the vicinity for many years (18). Eventually they were reintroduced by IFTA from a population on the other side of the island (18,19).

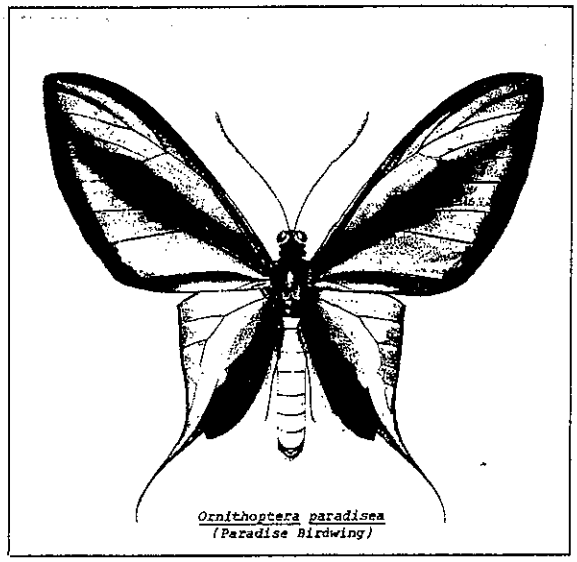
There is some controversy over the effect of removing large numbers of males from butterfly populations. Males tend to be collected more than females because they are often brighter and more easily captured at baits of urine or rotten fruit. One male may be capable of fertilizing several females, but there is little scientific evidence to indicate the degree of male depletion a population can withstand. In Brazil, where 50 million male Morpho butterflies enter the trade annually, a survey was undertaken to determine the proportion of males and females in nature (4). Results showed a ratio of ten or even several hundred males to every female in most species and it was concluded that the number of specimens taken through commercial collecting would not threaten populations of the species taken. These sex ratios have been widely disputed since the habits of females make them much more difficult to capture (16) and the sex ratio of captive-bred butterflies has not been shown to depart significantly from 1:1. More research is needed on this important aspect of butterfly reproduction and its implications to management.

Collecting and Legislation

CITES lists the birdwing butterflies (Ornithoptera, Trogonoptera, and Troides) and Parnassius apollo on Appendix II. Since these species were listed there has been a significant reduction in advertised trade of some species.

It is beyond the scope of this article to summarize national legislation protecting butterflies and interested readers should refer to the IUCN Invertebrate Red Data Book (24).

National legislation or voluntary restrictive codes are increasingly necessary in regions where habitat destruction is so extensive that the relatively minor effects of collecting may have a serious impact (9). Such laws or codes should encourage scientific study for management purposes and can be used to encourage public awareness of butterfly conservation needs. In the USA, the Endangered Species Act not only prevents collecting but also allows for the protection of habitat which is critical to the survival of the species. Legislation against collecting can only be successful if suitable habitat is set aside to conserve wild populations. Emphasis should be put on protected areas as well as protected species. This course of action requires thorough survey work in order to delineate critical habitat, and expert ecological studies to ensure adequate long-term management.



Ornithoptera paradisea
(Paradise Birdwing)

In countries with large areas of natural habitat, private collectors are most unlikely to have a significant impact on butterfly populations. Even when butterflies are protected within national parks there would generally be no harm in permitting amateur collecting on a small scale. It is particularly important that future generations of entomologists are not dissuaded from their studies by unnecessarily severe restrictions.

Commercial collecting has not been independently assessed in any of the main tropical centres of origin. There are insufficient data to judge whether monitoring or regulation of the trade is warranted. Research into the origin and extent of world trade in ornamental butterflies is urgently required.

CONCLUSIONS

Private collecting of butterflies can be an instructive hobby and is important for research into ecology, population dynamics, genetics and taxonomy. It brings a

great deal of pleasure to many people and does not usually threaten butterfly species. However, in a small number of cases irresponsible over-collection can cause a permanent decline. The latter is particularly true of populations on the edge of their species' range, and if the species has a very small range, has naturally low populations and low reproductive rate, or has already been severely reduced by other impacts.

Commercial collecting can be an important source of income and should not be dismissed as necessarily harmful. If populations are harvested in a sustainable manner, then both conservation and commercial interests can be satisfied. Habitat destruction is the main cause of decline in butterfly populations, but there is a danger that commercial collecting levels which were sustainable in the past may become damaging in the ever-decreasing areas of suitable habitat. Such may soon be the case for Trogonoptera brookiana, which lives only in the primary lowland forests of Malaysia and Indonesia.

Legislation against collecting and trade is unlikely to preserve a species unless parallel measures to protect its habitat are also enforced. Preliminary assessments are needed in order to decide whether extensive monitoring of international butterfly commerce is advisable. Where possible, captive-breeding should be encouraged to provide high quality specimens for the trade, to provide local employment and to ease the pressure on wild populations.

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Bangladesh Varanus Skins for Export

The Forestry Department of Bangladesh is to export 2.1 million Varanus skins, (Indian Monitor Varanus bengalensis, Yellow Monitor V. flavescens (both Appendix I), and Water Monitor V. salvator (Appendix II)), in order to clear pre-Convention stocks so that CITES regulations can be implemented. Japan has reservations on these species and it is believed that already 0.51 million skins have been exported there, but the destination of the remaining stock is currently unknown. The Department intends, however, to export the stock worldwide, including to CITES countries.

Chief Conservator of Forests, Bangladesh

Plant Working Group Meeting on CITES Implementation

by Tim Inskipp

A meeting of the Plant Working Group to discuss CITES implementation for plants was held in Tucson, Arizona from 27 February to 3 March 1984. Representatives from Australia, Canada, Denmark, India, UK, USA, EEC, IUCN, the Natural Resources Defense Council (NRDC) and WWF (US) attended.

The proposal to set up a working group was accepted at the CITES meeting in Botswana with a remit to 'examine the implementation of the Convention for plants and to make clear recommendations before the next meeting of the Conference of the Parties on how CITES can work better for plants' (Doc. 4.14).

The meeting commenced with a summary of the report on the implementation of CITES for plants prepared for the Botswana meeting by the Threatened Plants Unit (TPU) of the IUCN Conservation Monitoring Centre (Doc. 4.17).

This was followed by presentations on the plant trade issues in each country from the representatives.

In Australia the export trade largely involves cut flowers (e.g. 171 673 kg involving 57 species exported from W. Australia in 1983) and has little effect on wild populations. Imports are more difficult to control because of identification difficulties and lack of resources. Under new legislation, trade in CITES-listed species will be restricted to those covered by a management programme.

In Canada, it appears that enforcement of the Convention for imports (for animals as well as plants), is at present inadequate. The 1982 Annual Report listed two orchids as the only imports! The export trade involves a lot of artificially propagated cacti and orchids, and a considerable quantity of Ginseng (Panax quinquefolius) roots, some of which are of cultivated origin but many of which are wild-collected.

Denmark's problem is how to document the export of the huge number of plants that are artificially propagated in the country. The latest figures show that in one year, 25 000 phytosanitary certificates were issued for the export of 200 000 000 plants. The number that involved CITES-listed species is unknown but probably quite large, and there is no way that those plants can be segregated in the figures at present. There is no export of native wild orchids - the only CITES-listed species occurring in Denmark.

India has a large export trade in native orchids, but only cultivated specimens are allowed to be exported and these all have to pass through one of the four major ports, where checks are made on the origin of the plants involved. A list had been drawn up of 26 species of plants that will now be banned from export.

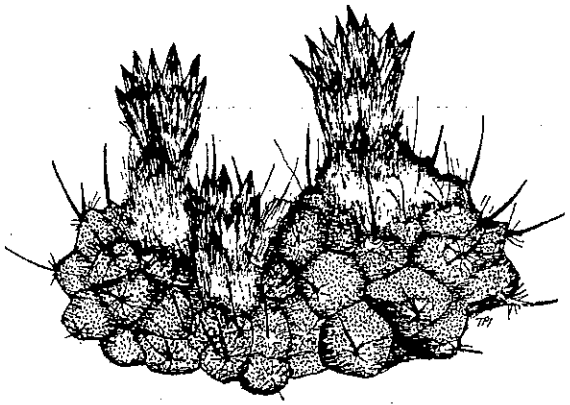
The UK representative described the import of orchids, cacti, other succulents and cyclamen which are the major CITES plant groups in UK trade. There is no export of wild-collected native orchids, the only CITES plants native to Britain, and little re-export of wild-collected plants. Enforcement efforts have therefore been concentrated on plant imports. Recent changes bringing the UK system into line with EEC Regulations were described, including the stricter controls for European orchids. The need for more publicity was stressed.

The US is a major importer and exporter of both wild and cultivated CITES plant material. Generally, determinations by the US CITES authorities do not allow export of wild-collected native orchids and cacti. The Ginseng export trade is worth $35m US annually and the effect on wild populations is not fully known. Enforcement of CITES for plants is the responsibility of APHIS (the plant health agency) which has no tradition of, or inclination for, controlling rare plant trade. Enforcement along the Mexican border remains a problem. TRAFFIC (USA) provided figures on 1982 US imports of Mexican plants:-

70000 cacti, 7000 cycads, 17000 orchids

Of these, 3% were declared as artificially propagated, 58% declared as of wild origin and the rest were of unknown origin or no declaration was made.

The first discussion topic was the rationalization and development of the CITES Appendices. The inclusion of higher taxa, e.g. Cactaceae and Orchidaceae, was looked at in detail but, despite the problems of enforcement, there are at present no possible revisions that would lead to more effective control of trade in the constituent species that are at risk. Many of the taxa on the Appendices have already been reviewed by TPU (Doc. 3.19) but unfortunately no proposals have yet been prepared for a CITES meeting of the Parties. Information on these and other taxa will be collected by the Group to assist in the preparation of proposals for amending the Appendices.



Blue-stemmed Turbinicarpus (Turbinicarpus loghophoroides - Appendix I)

The ease with which many species can be artificially propagated is one of the major stumbling blocks to effective implementation of the Convention. Although the procedure for dealing with such plant specimens had been simplified at Botswana (Conf. 4.16) there was a case for going further still, to alleviate the administrative burden imposed on Parties that were swamped by the sheer volume of trade. In addition, there was a need for identification aids to help distinguish wild-collected from artificially propagated plants.

The development by CITES of a Standardized Nomenclature is well under way for vertebrate animals but almost nothing has been done on plants so far. The main problem relates to the higher taxa in the Appendices which comprise large numbers of species e.g. Cactaceae and Orchidaceae. In the latter case there are widely divergent estimates of even the number of species involved so there is no hope of producing a standard list of species names in the near future. It was considered more feasible initially to prepare a list of generic names and synonyms for the families listed in the Appendices.

The production of identification material for CITES-listed animals is similarly well advanced but no progress has been made on plants. It was apparent that there was a need for material which would enable a non-expert enforcement officer to decide if a particular specimen referred to a CITES-listed taxon or not. There was also a need identified for more detailed material that would facilitate identification down to species level, especially as far as Appendix I taxa were concerned.

The treatment of parts and derivatives of plants was the subject of a Botswana resolution (Conf. 4.24) which attempted to improve the controls without recourse to the extremely difficult process of changing the text of the Convention. Unfortunately it had since become apparent that, in order for the recommendations in the resolution to be properly implemented, it was necessary to amend Appendix II to specify exempted parts and derivatives of plants where appropriate.

The salvage of CITES-listed plants from ecosystems that were about to be destroyed was a problem that had not been addressed by the Parties to CITES. The fate of specimens of Appendix I and the rarest Appendix II species requires special attention. In cases where destruction of the habitat was inevitable, and where cultivation in the country of origin was impossible, it would obviously be sensible to allow non-commercial export to another country for propagation purposes.

The fate of confiscated specimens of Appendix I and the rarest Appendix II species was also discussed. It was thought important to encourage countries of origin to accept the return of such specimens when they could be put to good use. If return was impracticable the plants should be accommodated in designated rescue centres where they could be propagated or used for educational purposes. They should only be destroyed as a last resort.

Each Party to CITES is required to produce an annual report on its trade in listed taxa. The standard of reporting is unfortunately very poor at present and particularly so for plants. Out of 77 countries that were Parties in 1982, only 29 have so far submitted a report for that year. Of those 29, only 16 include any information on trade in plants, and only five of these have reported comprehensively and down to species level. When wild-collected plants are involved it will only be possible to assess the threat to populations when trade is identified in annual reports at species level. For enforcement purposes information on individual shipments is also required.

In discussion on the role of Scientific Authorities, it was felt that the individual authorities often operated in a vacuum with little or no communication with Scientific Authorities elsewhere. In order to encourage uniform application of the Convention it was suggested that various lines of communication should be opened up.

The remaining discussion centred on methods of educating people and organisations to make them aware of the importance of CITES, particularly in relation to plants, and on developing methods for improving enforcement of the Convention.

Draft recommendations were formulated at the meeting and, when finalized, will be submitted for consideration to the meeting of the CITES Technical Committee in June. This report has related mainly to the discussion that took place at the meeting and only refers in a general way to the draft recommendations.

World Trade in Raw Skins

An indication of a global malaise in the skin trade is provided by the latest figures from the Organisation for Economic Cooperation and Development (OECD). Their figures (below) show total value of imports and exports recorded in Customs statistics. There was a more or less steady increase in the value of the international skin trade from 1970 to 1979 but from 1979 to 1981 the world market value of exports dropped 23% and of imports 28%.

In 1981 the world market value of raw skin exports was US$3 696 136 000 and of imports $3 737 646 000.

These figures refer to the raw hides, skins and furs of all animals, including domestic livestock and farmed fur-bearers. The intention here is to reflect the world status of the general skin trade.

Raw Hides, Skin and Furskins 1983

(trade value in US$1000)

Year	EXPORT World	EXPORT EEC	Year	IMPORT World	IMPORT EEC
1965	626778	341689	1965	1021124	196109
1970	804737	450202	1970	1102154	231479
1971	845331	477358	1971	1146101	248208
1972	1430615	754413	1972	1605824	371720
1973	1916532	986103	1973	2212399	484608
1974	1753229	894631	1974	2011139	494300
1975	1667821	861901	1975	1911205	509376
1976	2494609	1315060	1976	2779133	724914
1977	2795675	1399998	1977	3002275	755768
1978	3364583	1690261	1978	3510669	986223
1979	4850778	2550322	1979	5192068	1442859
1980	3933511	1976713	1980	4263966	1135021
1981	3696136	1683027	1981	3737646	1111373

Organisation for Economic Cooperation & Development, Foreign Trade by Commodities Vol. I Exports, Vol. II Imports, publ. 1983.

'Roo Trade Booming

Over AU$8.3 million worth of pickled kangaroo skins and hides were exported from Australia during the year ending 30 June 1983. This was the kangaroo commodity that earned the greatest foreign exchange, but Australia also exported over $1.3 million of raw kangaroo (and perhaps wallaby) skins, nearly $1.3 million of kangaroo leather and nearly $942 000 worth of kangaroo meat.

Customs data produced by the Australian Bureau of Statistics for the year 1982/83 (table below) put Australia's exports of pickled kangaroo skins at 1.55 million at an average value of $5.36 each and of raw skins at nearly 206 000 averaging $6.45. Italy is reported as the major destination for both pickled and raw skin exports, accounting for over half of the former and nearly 70% of the latter. F.R. Germany and Japan were the second and third most important destinations.

Of the 597 tonnes of fresh, chilled or frozen kangaroo meat exported from Australia over the year, close to 60% was destined for F.R. Germany. Japan and Norway each accounted for 15%.

Figures for Australia's exports for the period July to September 1983 suggest that the trade patterns are changing and that Germany has dropped out of the meat market.

In response to the growing controversy over the killing of kangaroos, a study of the European trade in kangaroo products is currently being undertaken at WTMU by Alexandra Dixon. A comprehensive report on the findings of this research will be completed in August 1984.

Australian Exports of Kangaroo Products

July 1982 - June 1983

Kangaroo meat, fresh, chilled or frozen

COUNTRY	QUANTITY (kg)
Austria	32144
Germany, Fed. Rep. of	344269
Japan	90830
Mauritius	33728
Malaysia	2040
Norway	93703
Papua New Guinea	326
TOTAL:	597040

Pickled kangaroo hides and skin

COUNTRY	QUANTITY
Bulgaria	1340
Canada	75
Germany, Fed. Rep. of	223106
Finland	550
France	65175
Hungary	46130
Hong Kong	66075
Italy	882359
Japan	127849
New Caledonia	90
Korea, Rep. of	23029
Spain	2830
Sweden	200
Taiwan	365
Thailand	18346
UK	52238
USA	44640
TOTAL:	1554397

Kangaroo/Marsupial leather

COUNTRY	VALUE ($AU)
No country details	1287978
TOTAL:	1287978

Raw kangaroo and wallaby skins

COUNTRY	QUANTITY
Belgium/Luxembourg	793
Germany, Fed. Rep. of	14463
Hong Kong	249
Italy	144969
Japan	33578
Kuwait	580
New Caledonia	20
New Zealand	270
Papua New Guinea	300
Rep. of Korea	3100
Singapore	270
Switzerland	1230
Thailand	250
UK	3004
USA	2769
Ship Stores	20
TOTAL:	205865

Source: Australian Bureau of Statistics.

Bolivian Export Ban

In Bolivia a ban on the capture and export of wildlife becomes effective on 1 April 1984 for one year. The ban is created by Ministerial Resolution (AS. GRAL. RESOLUCION MINISTERIAL N° 15/84) of 19 January 1984. According to Prodena Bolivia, the ban was originally due to come into effect on 1 January but, in response to trade pressures, three months were allowed for the exporters to dispose of their existing stocks.

Bolivian Wildlife Society

Cat Skins Seized in Thailand . . .

In December 1983 the CITES Secretariat informed the Management Authority in Thailand that Tiger skins were on open sale in several shops in and around Bangkok. They named one establishment "Diana Gems Factory" from information supplied via HRH the Duke of Edinburgh.

As a result of this, the Secretariat has been informed by the Royal Forest Department of Thailand that two shop owners in Pattaya have been arrested for selling Leopard and Tiger skins. The shops, Diana Gem Jewelry (which we assume to be the same as, or part of, the Diana Gems Factory) and A.A. Jewelry, had a number of specimens confiscated. At the former, these included one full-mounted Tiger skin (Panthera tigris), two full-mounted Leopard skins (Panthera pardus) (spotted phase) and one full-mounted black Leopard skin; at the A.A. Jewelry shop, nine items, including skins and handbags of Leopard and Tiger, one stuffed Lar Gibbon (Hylobates lar) and three stuffed Hawksbill Turtles (Eretmochelys imbricata bissa) (all Appendix I species) were confiscated.

It appears that Thailand is one of the main outlets for the products of large Asian cats. A recent survey has found that over 300 shops in and around Bangkok have on average 15.4 cat claws and 7.4 large cat teeth of unknown species and several Tiger and Leopard teeth on open sale. There are large profits involved in this trade; the claws and teeth of a single Tiger may be worth US$2000-$4000. Tiger and Leopard skins are also known to be sold secretly in some stores, but law enforcement has greatly reduced the local sale of cat skins. Reports suggest that most of the cats are coming from Burmese states along the Thai border and from forests in the area of Uthai Thani Province and neighbouring provinces along the Tenasserim Range.

Although the trade in Tiger and Leopard skins is being reasonably controlled through efforts of the Wildlife Conservation Division, it would seem imperative that officials are trained to identify other cat products; the successful prosecution of offenders in court must include positive identification by a Thai expert.

Tiger (Panthera tigris)

. . . and Denmark

On 28 November, an attempt was made by two Norwegians to smuggle two mounted Leopard skins and one mounted Tiger skin into Denmark from Bangkok. The skins were confiscated and the two offenders fined a total of DK130 000 (approx. US$13 000) against which they are to appeal.

Ministry of the Environment, Denmark

New Legislation for Zimbabwe

A new Act to amend the Zimbabwe Parks & Wild Life Act 1975 and the Trapping of Animals (Control) Act is shortly to be come into force. This legislation will impose heavier penalties on persons in possession of contraband wildlife and wildlife products and those acting in contravention of the management and control regulations.

Where the offence involves either the sale or manufacture of any article from trophies of rhino horn or ivory, the purchase of live animals or trophies, or the selling or donating of any such item hunted in contravention of the Act or without a licence, a fine not exceeding five times the value of the ivory or rhino horn or 10 000 dollars will be imposed, whichever is greater, or imprisonment for a period not exceeding five years, or both.

Any offenders, in breach of the registration or issue of certificates of ownership in respect of registered rhino horn and ivory, or in breach of the regulation, control, registration or prohibition of the sale, disposal or transfer of unregistered ivory and rhino horn, are liable to a fine not exceeding three times the value of the ivory or rhino horn concerned, or 5 000 dollars, whichever is the greater, or imprisonment for a period of two years or both such fine and such imprisonment.

In addition, fines for obtaining other animals, plants and their products in contravention of the Act have been considerably increased.

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STOP PRESS

Prodena Bolivia informs us that Bolivia's wildlife dealers now have until the end of April to dispose of all their stocks. The Ministerial Resolution banning the capture and export of wildlife from 1 April 1984 (see page 13) has been overruled by a new Resolution (85/84), delaying the ban until 1 May.

According to the CITES Secretariat, Bolivia's inventory of animals held by the dealers includes some 18 000 specimens of psittacines and 1579 monkeys, all on CITES App. II, whose export may be allowed, under strict control, from Santa Cruz Airport. It appears that only specimens of the few dozen Ara militaris held will not be permitted, since they are protected by law in Bolivia.