



WILDLIFE TRADE MONITORING UNIT

Traffic Bulletin

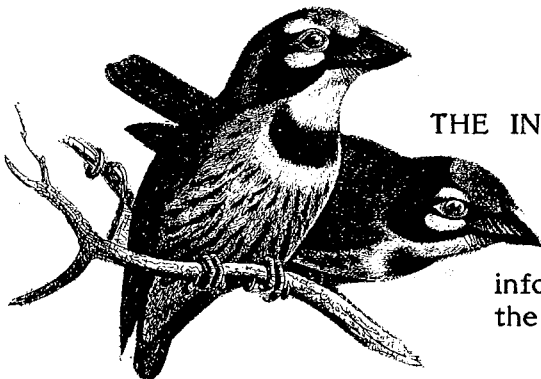
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THE INDIAN BIRD TRADE, our special feature in this issue, by Tim Inskipp, is based on a study carried out in India in 1977. Several summaries of the data have already been published, notably in "The Bird Business" by Greta Nilsson. All of the collected information is included here, together with updated figures on the export trade.

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Belgium Joins CITES

On 3 October 1983, Belgium ratified CITES, becoming the 82nd Party to the Convention. This will become effective from 1 January 1984 when the EEC Regulation to enforce CITES among all EEC Parties also comes into force.

Burmese Elephants Exported

Wild Asian elephants (*Elephas maximus*) are being caught in Burma and illegally exported to Thailand and possibly Assam, for timber logging and transport. The elephant is a protected animal in Burma under the Wild Life Protection (Amendment) Act, 1956 which forbids elephant hunting as well as the possession, sale or purchase of live or dead elephants or their products without a licence. Furthermore, although Burma is not a Party to CITES, both Thailand and India are Parties.

This information, sent to us by John Blower and his colleagues at the Nature Conservation and National Parks Project of the Government of the Union of Burma, brings to light an additional problem in the implementation of CITES for an Appendix I species.

The elephants are evidently being moved into Thailand through remote areas controlled by insurgents, and this may also be true of ivory poached in Burma. It is reported that the only ivory legally exported from Burma comes from tusks sawn off elephants newly captured for logging, but that this is probably a very small quantity.

CITES annual reports include only four transactions in Asian elephant ivory from Burma over the period in 1975-82. These were: two US imports from the United Kingdom, origin Burma, one of two ivory carvings and the other of one tusk; and two Swiss imports from Hong Kong, origin Burma, one of two tusks and the other of 10 kg tusks.

New Traffic Offices

Two new Traffic offices are about to be opened: Traffic (Australia) and Traffic (Netherlands).

Frank Antram, formerly at the Wildlife Trade Monitoring Unit, will be the Director of Traffic (Australia) which is to be launched in January 1984. This is due to the work of Mike Kennedy of the Fund for Animals, Australia. The funding for this office comes from the FFA of Manly, New South Wales, which made a direct appeal to its members for the money. The new office will be concentrating on Australian wildlife trade but, for the time being, will also include the rest of Australasia in its area of interest. The address of Traffic (Australia) will be: PO Box 371, Manly 2095, NSW, Australia.

Minouk van der Plas-Haarsma, the prime mover in establishing Traffic (Netherlands), is to be Secretary of the Traffic (Netherlands) Committee. Under the Chairmanship of Wim Bergmans, the other members are Kees Schouten, Jaap van Wingerde and Aat van Uyen. It is planned that operations will begin by December 1983. Financial support has been provided from a variety of sources but is unfortunately insufficient to pay for any full-time staff. The office will therefore be operated on a voluntary basis for the time being. It is hoped that accommodation will be found in the Zoological Museum of the University of Amsterdam. Meantime, the address of Traffic (Netherlands) will be: Muur 10, 1422 PJ Uithoorn, Netherlands.

Cactus and Succulent Show

A thriving trade in cacti and succulents took place at the National Cactus and Succulent Show in Luton, Bedfordshire, UK, on 27 August. Most of the plants on sale were nursery-grown but wild-collected plants including rarities were also offered.

Many of the cacti species added to Appendix I of CITES earlier this year were available. One nursery offered *Backebergia militaris* offcuts for £35 and another specimens of *Mammillaria plumosa* for over £30. Wild-collected specimens were also available of *Ariocarpus trigonus*, *Strombocactus disciformis* and the range of *Turbinicarpus* spp. At least five nurseries were offering *Leuchtenbergia principis* but only on one stall were specimens offered as habitat-collected plants.

It was good to see propagated plants of other rarities also on sale, including seedlings of *Pachypodium namaquanum* and *Obregonia denegrii*. The International Organisation for the Study of Succulent Plants (IOS) was represented at the show with a stand discouraging the purchase of any plant unless nursery-grown. The conservation message has obviously not penetrated to all traders however. One nursery had specimens of *Pelecypora strobiliformis* included in its habitat-collected plant section. This endangered species known only from a few areas in Tamaulipas and Nuevo Leon in Mexico was transferred from Appendix II to Appendix I of CITES in 1981.

Sara Oldfield

Threatened Plants Committee, Kew.

S. American Countries Urged to

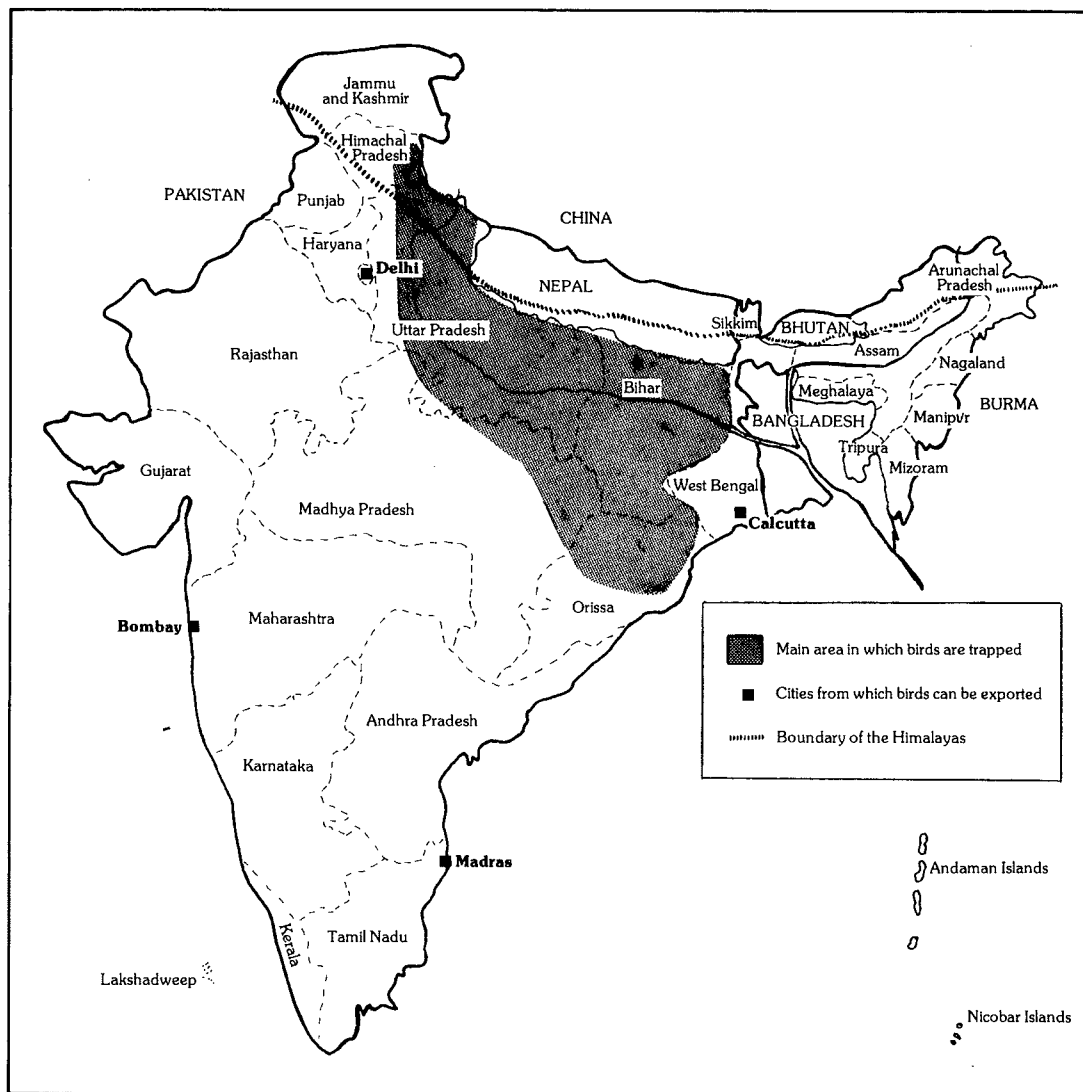
Tighten CITES Controls

At the first seminar on CITES implementation in South and Central America and the Caribbean held in Washington, DC, USA from 1-12 August 1983, the representatives of the participating countries: urged the Government of Bolivia to "take appropriate measures leading to a reinforcement of control measures on trade that would prevent the illegal exit of specimens of species of fauna and flora" listed on the CITES Appendices; urged the governments of Venezuela and Bolivia to "properly implement the Convention" with regard to their relations with the CITES Secretariat and reminded Costa Rica and Colombia, "in their capacities as elected members of the Standing Committee and the Technical Committee respectively, of the necessity for co-ordination and consultation with the countries of the region they represent".

The CITES Secretariat was requested to take appropriate measures for the establishment of a Traffic office for the region. The Secretariat was also requested "to further its steps with respect to the major importing countries for the purpose of preventing the commercialization of products of wild animals originating in the region (of Central and South America) that have left the region without the documentation required by the Convention". The Secretariat was also recommended to encourage the Government of Mexico to adhere to the Convention "in consideration of the importance of the participation of [Mexico] in trade in species listed on the Appendices of the Convention and of the necessity of integrating the actions taken by the countries of the region of these matters".

CITES Secretariat

Figure 1
The Major Bird Trapping Area in India



The Indian Bird Trade

by Tim Inskipp

TRAPPING

In India birds are trapped primarily in the northern states of Bihar and Uttar Pradesh - mainly in the Gangetic plain and the foothills of the Himalayas. Some are taken further south in Orissa, Madhya Pradesh and Maharashtra, and in Assam to the East (Fig. 1). Many birds are caught either on or around agricultural land or in light forest.

The trappers are generally professionals belonging to certain castes or tribes whose techniques have been passed down. The majority seem fairly sedentary, relying on short trips from their home base, but some may travel long distances in search of particularly valuable birds. One trapper regularly journeyed between Calcutta and the Madras area. Most trapping is carried out to order, which means that the trapper must be able to identify the species (and sometimes the sex and/or age) and avoid wasting effort in catching unwanted birds.

The following methods are used, but others are also employed to catch birds for food:

(a) Bird lime devices

Bird lime is usually prepared from the sap of the common and widely planted Peepal tree *Ficus religiosa*

and is used in at least three ways:

(i) Two slender twigs are bound together as a fork, and bird lime is applied to their inner surfaces. This is attached to a series of extension poles which are slotted together to the required height, and the bird is caught by delicately approaching and touching it with the sticky forked stick. Considerable skill is required in reaching the bird without disturbing it, and then touching it in just the right spot so that it neither escapes nor loses any feathers. Usually, it is secured by both its wings. After capture, the bird is carefully removed from the forked stick. The lime is removed from the feathers by wiping with vegetable oil. If done properly, the bird is obtained undamaged. Sometimes when a bird is not touched in exactly the right place, it escapes, leaving some flight feathers stuck to the lime.

The types of birds caught with this technique are mainly small to medium omnivorous or insectivorous species, e.g. flycatchers *Ficedula/Cyornis* spp. and barbets *Megalaima* spp., which tend to sit about on trees or on other vantage points.

This method is also used at night to pick birds out of roosting trees after dazzling them with a torch.

The same basic technique is employed to catch birds on the ground, the trapper concealing himself behind a screen, feeding the poles through the grass to reach the bird. This is used for species such as the Hoopoe Upupa epops and wagtails Motacilla spp. In the Kumaon foothills, trappers hide behind a shield of leaves holding a limed bamboo pole in the right hand, and a similar pole in the left hand, on the end of which is tied a small owl Glaucidium spp. which acts as a decoy (Nichol, 1978). Small birds which come to mob the owl are brought within catching range.

(ii) A second method for trapping insectivorous birds that take prey on the ground involves the use of two pieces of pliable cane tied together at right angles and bent to form a four-legged dome. The legs are covered in lime, and a mole cricket Gryllotalpa sp. is suspended by a piece of cotton from the top of the dome. The trap is then placed on the ground near where the selected bird is feeding; if it takes the cricket, it pulls the limed sticks down on to itself and is stuck fast. The technique is used for small birds such as the Jungle babbler Turdoides striatus, and also quite large birds, e.g. egrets Bubulcus and Egretta spp., when a larger dome is used and a weight such as a grass tussock is attached to prevent the bird from running off when caught. Simulated birds made from sticks bearing plumes are used as decoys to attract the required species into the general area of the trap.

(iii) Lime sticks can also be tied at the top of a tree or other prominent perching site, and decoy birds or bird call whistles may be used to attract the desired birds into the area and onto the sticks. This method is used particularly for catching gregarious small birds such as bulbuls Pycnonotus and Hypsipetes spp. Small birds of prey, Falconiformes, are caught by attaching lime sticks to a cage of small birds placed on the ground.

The mortality involved in these various techniques is undoubtedly very low.

(b) Clap-nets

This is the main method of catching seed-eating passerines. The net is normally made of jute string, which is tied into a small gauge mesh, and then two sections of mesh are pegged down to form the sides of a diamond about 3 ft. by 2 ft. The folds of the net are held under tension by bamboo pegs on each side, which can be released by pulling a long string leading from one end of the net. The two sides of the net meet in the middle and trap any bird inside the diamond. Birds are attracted by baiting the ground with sprays of millet and the use of decoy birds. Some of the latter are tied to the ground inside the net by means of a short piece of string sewn into the skin of the belly and others are left in a small wire cage beside the net. The trapper sits at the end of the long string and releases the net when a bird (or birds) lands inside. This method is used to trap large numbers of birds in a short period of time, and the majority of the passerine species that have been exported, such as the Red avadavat Amandava amandava and the Red-headed bunting Emberiza bruniceps, were obtained in this way. When the simplest net design is used, some birds may be struck by the bamboo pegs flying inwards after the release of tension but mortality at the time of trapping is normally very low.

(c) Taking fledglings from the nest

Hill mynah Gracula religiosa fledglings are often obtained by chopping down trees containing the nest-holes. A shortage of nest sites results. In some areas artificial nests are constructed and put up in trees (Bertram, 1969). Other species obtained in this way are Alexandrine parakeets Psittacula eupatria, pittas Pitta

spp., and several thrushes such as the Asian magpie-robin Copsychus saularis and the Orange-headed ground thrush Zoothera citrina. Some birds may be crushed when trees are felled; and if the fledglings are taken too young, they may be impossible to rear in captivity.

(d) Slip nooses

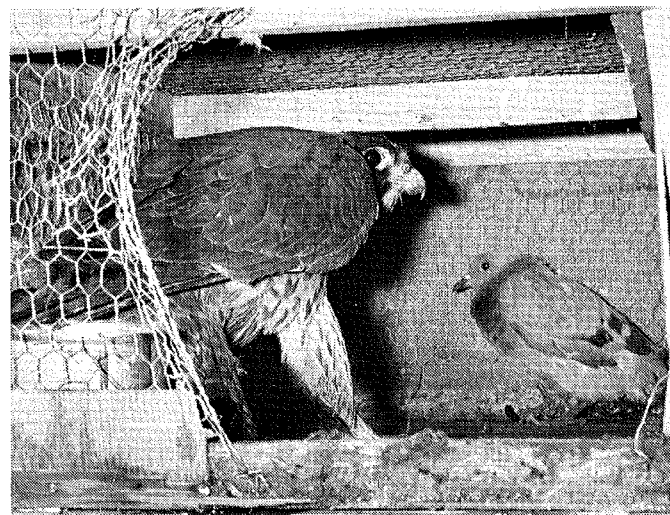
These are used for catching larger water birds such as cranes Gruidae and storks Ciconiidae. Numbers of nooses are set up in the water in places where the birds feed. When a bird steps inside it, the noose tightens around the leg. This sometimes results in a broken leg and an unsaleable bird.

(e) Mist nets

These are not commonly used in India because of their expense and the difficulty of obtaining them from Japan. However, they are certainly used to some extent (A. Kumar, pers. comm.). Elsewhere they are often used for parrots, especially in Central and South America (Freeman, 1973; Rogers, 1969), and Roots (1970a) suggests they are widely used for catching softbills.

CAPTIVE CONDITIONS AND PRE-EXPORT MORTALITY

After trapping, the birds usually pass through several handling stages before they are finally exported. The trapper would normally accumulate a number of birds prior to passing them on to a small town dealer, who may be the agent for one of the exporting dealers in one of the four government approved export centres - Calcutta, Delhi, Bombay, and Madras. Alternatively, the first dealer may be the agent for a further middleman in a collecting centre covering a large area, such as Patna in Bihar and Lucknow in Uttar Pradesh.



Peregrine falcon (Falco peregrinus) and Rock dove (Columba livia) provided as food (Heathrow, 1973).

The trapper keeps the birds in small portable cages. Not having the time or expertise to begin the often difficult task of coaxing them onto artificial diets, he passes them on as soon as possible. The highest mortality probably occurs at the second stage when the birds are in transit from the trappers to the exporter. There may be several middlemen involved, who often have insufficient knowledge of the needs of the various animals they handle. The birds may be subjected to rigorous local transport conditions culminating in a long gruelling journey in an overcrowded, poorly ventilated railway

TABLE 1

Mortality at Premises of One Indian Bird Dealer
(Dey and Dutta: Mortality (1st-21st October 1977))

Common Name (Scientific Name)	Total Deaths No. Birds	Minimum numbers present 10/10
Alexandrine parakeet (<i>Psittacula eupatria</i>)	2	30
Ringneck parakeet (<i>P. krameri</i>)	8	200
Blossom-headed parakeet (<i>P. cyanocephala</i>)	2	300
Moustached parakeet (<i>P. alexandri</i>)	3	70
Budgerigar (<i>Melopsittacus undulatus</i>)	3	?15
Blue-throated barbet (<i>Megalaima asiatica</i>)	4	6
Lesser golden-backed woodpecker (<i>Dinopium benghalense</i>)	1	18
Red-whiskered bulbul (<i>Pycnonotus jocosus</i>)	2	30
Red-vented bulbul (<i>P. cafer</i>)	1	30
Gold-fronted leafbird (<i>Chloropsis aurifrons</i>)	8	267
Small minivet (<i>Pericrocotus cinnamomeus</i>)	1	?
Forest wagtail (<i>Dendrohanthus indicus</i>)	1	10
Magpie robin (<i>Copsychus saularis</i>)	6	42
White-rumped shama (<i>C. malabaricus</i>)	6	90
Orange-headed ground thrush (<i>Zoothera citrina</i>)	2	30
Indian blue robin (<i>Luscinia brunnea</i>)	1	5
Red-billed leiothrix (<i>Leiothrix lutea</i>)	1	200
Tickell's blue flycatcher (<i>Cyornis tickelliae</i>)	2	10
Oriental white-eye (<i>Zosterops palpebrosa</i>)	3	300
Red avadavat (<i>Amandava amandava</i>)	4	1100
Green avadavat (<i>A. formosa</i>)	1	?
Spotted mannikin (<i>Lonchura punctulata</i>)	2	1400
Black-headed mannikin (<i>L. malacca</i>)	34	500
Baya weaver (<i>Ploceus philippinus</i>)	1	?
Chestnut-tailed starling (<i>Sturnus malabaricus</i>)	3	150
Common mynah (<i>Acridotheres tristis</i>)	1	40
Other species		462
TOTALS	103	5305

freight carriage. The gregarious small birds are kept in large wire cages, 100 or more per cage, and the more aggressive and larger species, individually in compartments of cages constructed of bamboo and cane. Seed eaters, which can easily be supplied with their normal diet, can cope reasonably well with these travel

conditions, but others which require specialized food, such as live insects, must reach their destination quickly if they are to survive.

Once in the hands of the exporters, the birds usually receive adequate attention because they have to rely on supplying live birds in reasonable condition to foreign importers to remain in business. The birds are kept in cages similar to those used by middlemen and are normally held for a few days only, prior to export. They are fed on a variety of food, e.g. oranges, bananas, barley, millet, ants' eggs and mealworms. The cost of feeding 3,000 birds may be as much as Rs 500 (£28) (US\$55.80) a day. One exporter in Calcutta, visited a number of times, who regularly had at least 5,000 birds in stock, provided a breakdown of one month's mortality from his account books. He lost 103 birds of 26 species (Table 1), a mortality of less than 2%. Less dedicated exporters probably lose a greater proportion than this, but it is likely that high mortalities only occur in the case of epidemics. Unfortunately, epidemics may be of common occurrence because of the unhygienic nature of the holding premises and their surroundings. This is particularly so in the case of the Calcutta Market, where the birds are in close proximity to the large poultry market. One exporter had about ten Green avadavats which were all that remained from about 800 which had been sent to him a few days previously.

Each consignment of birds has to be accompanied by a veterinary health certificate signed by an official government veterinarian. This requires a veterinary examination prior to export and usually states that the birds had been in the hands of the owner (i.e. exporter) for at least three months, and that any avian disease was unknown in the country of origin during the previous six months. It seems unlikely that these certificates ever fulfil the stated requirements. At least some of the exporters had supplies of blank signed certificates which could be completed for consignments that would therefore have no veterinary check at all. All this inevitably means that many birds are exported before they have adjusted to being in captivity. The long air journey and completely different climatic conditions in the importing country are often too much for the freshly caught birds, a high proportion of which die soon after import (Table 2).

Any disease present in the birds could quickly spread through a consignment in the crowded conditions prevailing prior to and during export. Of about 600 parakeets *Psittacula* spp. and 25 Indian rollers *Coracias benghalensis* exported from India to the UK in January 1975, 80% died during the first week from Newcastle Disease (Inskipp, 1975; and Inskipp and Thomas, 1976; Corrigenda). A series of post mortem examinations of freshly imported birds revealed the presence of *Yersinia pseudotuberculosis* in the only Indian parakeet examined (Keymer, 1972).

DYEING OF BIRDS

This controversial practice was commonly employed by Indian exporters for many years. The species involved were usually the dull-coloured common estrildids, especially the Spotted mannikin, Indian silverbill *Euodice malabarica* and (non-breeding) Red avadavat. The dyes used were red, green or yellow water soluble vegetable dyes which, contrary to many previous accounts (e.g. Lawyer, 1977; Nichol, 1978), are non-toxic and, if administered carefully, cause no apparent discomfort to the birds. Usually the liquid was sprayed through the mesh of the cage with a stirrup pump, although occasionally it was tipped through the top of the cage from a bucket. Of about three thousand freshly dyed birds examined in Calcutta, none succumbed from the immediate effects of the dye; and two weeks later, only a couple had died. This was a lower mortality rate than for several thousand non-dyed estrildids held in the same premises at the

same time. Some authors (e.g. Robbins, 1974; Lawyer, 1977; Nichol, 1978) have claimed that a third or more of the birds die during the process, but it is unlikely that the dealers could sustain such heavy losses regularly and still remain in business. Reliable first-hand accounts (e.g. Platt, 1974; Kumar, *in litt* 1976) support the findings of this study in stating that the dyeing process apparently causes very little mortality.

TABLE 2

Mortality of Transported Birds

	Pre-export	Transit	Quarantine
Time (days)	14-21	1-2	30-35
Mortality	c. 5% (India)	to UK 5% to USA 2%	UK 5% USA 17%
Remainder (from 1,000 birds)	950	UK 902 USA 931	UK 857 USA 773

The use of dye turns superficially unattractive birds into a more saleable commodity. However, it is probable that the purchasers know as little about keeping birds as they do about identifying them, and therefore, the likelihood of a dyed bird surviving until its next moult is quite small. The proportion of birds being dyed in India decreased in recent years because of adverse publicity and it is likely that none is now exported.

INDIA: A MAJOR EXPORTER OF WILD BIRDS

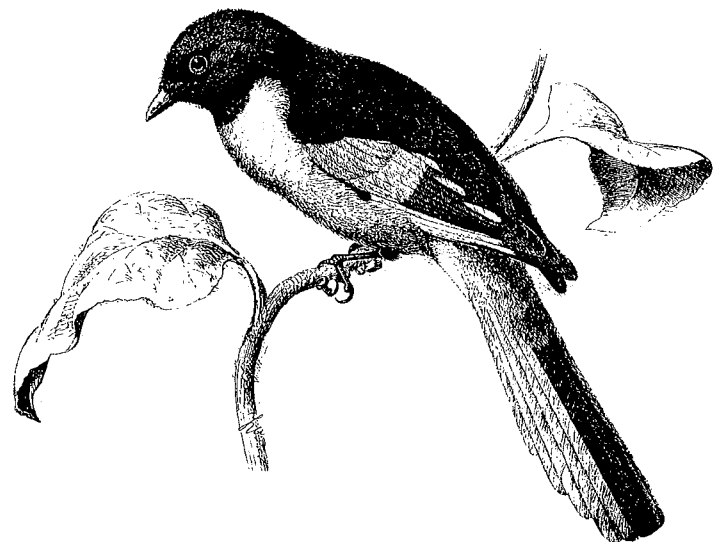
The total number of birds exported from India in the eleven years 1970-80 was nearly 14.8 million - an average of about 1,345,000 per year (Appendix 1). They went to six continental areas (Table 4) and involved over 68 different countries (see Appendix 1). The major countries of destination of the birds are compared with those to which Senegal exported (Table 3). Senegal has been the other major world exporter of wild birds besides India - an annual average of about 1,334,560 for the years 1970-80 (Bruggers 1982; Ruelle and Bruggers 1983). The comparison clearly shows the importance of India as a source of birds for Japan - in fact, nearly a quarter of Japan's total imports of birds in 1976 came from India (Wild Bird Society of Japan, 1978) - and the great importance of the EEC to both countries (49% of Indian exports and 82% of Senegal exports).

The annual pattern of exports from India shows that after a peak in 1972 (in which year the USA restricted all imports of birds for most of the year), there was a sharp drop in 1973. Exports declined somewhat between 1974 and 1977 but dropped sharply during 1978 to 1980, the 1980 figure being only 1.8% of that for 1972.

The reason for the sudden decline in exports in 1978 is not entirely clear but the ban on export of all estrildids between April 1979 and March 1981 would certainly have had a significant effect on the trade.

DISCREPANCIES IN TRADE FIGURES

The numbers of birds exported from India to other countries are compared with the numbers imported by

Scarlet minivet
(*Pericrocotus flammeus*)

those countries from India - in the few cases where statistics are available (Table 5). There is little correlation between the pairs of figures, and although in many cases India apparently exported more birds than the other country imported, in 1976 the UK apparently imported nearly half as many birds again as India exported to it, and in 1970 Singapore imported $2\frac{3}{4}$ times the number India exported to that country. King (1974) found enormous discrepancies between the Singapore exports and US imports. In both 1973 and 1974, about 17,000 birds were exported from India to the USA but were not recorded as imported by the USA. Some of these may have been dead on arrival in the USA or refused entry because of disease - as were 20% of all birds received by the US for importation in 1976 (Nilsson, 1981) - but it seems unlikely that this would account for virtually all the birds from this one country. The closest correlations with the Indian statistics, apart from cases of zero trade, are in 1978.

TABLE 3

Countries to Which India and Senegal
Exported Most Birds, 1970-80

Importing Countries	Percentage of Exports from India* Senegal**	
Japan	39.9	2.9
Italy	12.1	9.0
France	10.9	25.1
Belgium	8.0	11.4
German Fed Rep	6.7	16.9
Netherlands	6.3	12.0
USA	6.2	5.6
UK	4.3	5.9
Denmark	0.6	1.3
All other countries	5.0	9.9
TOTAL	14773524	14680161

* Derived from Monthly Statistics of the Foreign Trade of India;

** Derived from Exportations, Commerce Special 1970-75, 1977-78; Bruggers (1982) 1976; Ruelle & Bruggers (1983) 1979-80.

TABLE 4

Continental destination of birds exported from India and Senegal, 1970 - 1980

	Exports from INDIA*	Exports from SENEGAL**
EUROPE	50.2%	89.1%
No. of importing countries	23	18
ASIA	43.4%	3.2%
No. of importing countries	29	9
NORTH AMERICA	6.3%	6.4%
No. of importing countries	2	2
AFRICA	0.06%	0.6%
No. of importing countries	8	14
AUSTRALIA & PACIFIC	0.03%	0.06%
No. of importing countries	4+	2
SOUTH & CENTRAL AMERICA	0.02%	0.5%
	3	8
Unknown		0.08%
Total no. of birds	14773524	14680161

* Derived from Monthly Statistics of the Foreign Trade of India.

** Derived from Exportations, Commerce Special, Ministère des Finances et des Affaires Economique, Direction de la Statistique, B.P. 116 Dakar 1970-75, 1977-78; Bruggers (1982) 1976; Ruelle & Bruggers (1983) 1979-80.

VALUES OF EXPORTED BIRDS

The annual average value per bird for all countries has more than quadrupled during the period 1970-80 (Fig. 2). Of the nine main countries importing birds from India, seven more or less conform with the average increase in values, but two show some enormous annual fluctuations. Denmark agrees with the typical pattern except in 1974 when the value was ten times the average for other years. Either some very expensive birds (e.g. birds of prey?) were imported that year, or possibly a ten-fold mistake has crept into the published figures. The birds exported to the USA have shown fluctuating values since 1972. As noted above, virtually no birds were recorded as imported into the USA from India in 1973 and 1974.

The value per bird for India and Senegal can be compared. The Indian average for 1970-80 was Rs 4.5, which is equivalent to 26p sterling (US\$0.62 (1980)) (at an average exchange rate of £1 = Rs 17.5). For Senegal, the average for 1970-80 was 36.5 Frs CFA, which is equivalent to US\$0.15. The cheapness of birds from Senegal is perhaps an indication of the reason why Indian trade has declined in recent years.

The value of each exported bird accrues from the time it is trapped to the time it is sold for the final time in the importing country. Thus, many common birds may be worth 200 times more to a foreign retailer than to the local trapper (Table 6). The Ring-necked parakeet sold for about £12.50 (US\$26.47) in 1977 in the UK and

fetched about Rs 1 (= c. 7p) (US\$0.18) for the Indian trapper. The retail prices of Indian birds in 1983 in the UK range from about £3 (US\$4.5) for a mannikin *Lonchura* spp. to £350 (US\$525) for a Sarus crane *Grus antigone*.

SPECIES EXPORTED

Of 1182 species of birds in 98 families recorded in India, 293 of 60 families have been identified as exported since 1970 (Appendices 2 and 3).

Nearly all those exported were species that breed in India - only 17 winter visitors from further north in Asia were involved. Of these, 212 were recorded by the RSPCA at Heathrow Airport, London, UK (Inskipp, 1975; and Inskipp and Thomas, 1976). One hundred species were imported by the USA during 1970-72 (Clapp & Banks, 1973 a and b; Clapp, 1975), and the remaining 53 additional species were recorded as imports into the UK. (A number of exported species which are not indigenous to India have been omitted from this table. It has been assumed that these species, which are mainly common African seed-eating passerines, were being re-exported).

Bird dealers have advertised 238 Indian species for sale in the UK between 1970 and 1982. A few may not have been of Indian origin because they are also imported from other countries. About half of the species exported

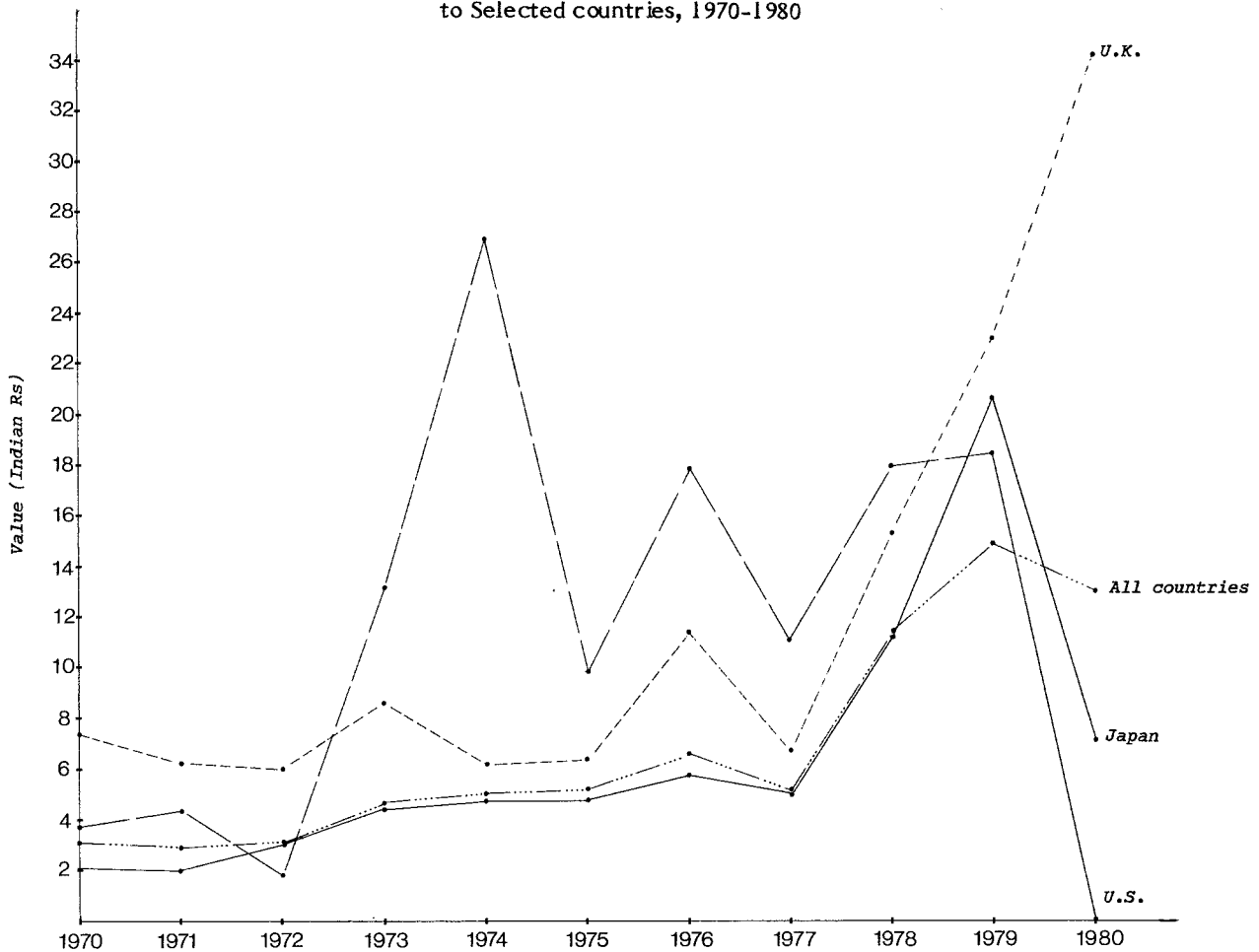
TABLE 5

Discrepancies Between the Number of Birds Exported to Selected Countries from India
and the Number Imported by Those Countries from India

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
JAPAN											
Number exported by India	672858	767124	813832	708552	816804	828123	710858	456313	83420	25160	6665
Number imported from India (a)	N/A	N/A	N/A	N/A	N/A	N/A	690032	N/A	N/A	N/A	N/A
MALAYSIA											
Number exported by India	320	0	0	1260	200	0	0	0	0	0	0
Number imported from India (b)	N/A	N/A	N/A	460	2	0	1	0	0	22	0
SINGAPORE											
Number exported by India	6296	4604	5754	990	0	1528	306	200	597	0	0
Number imported by India (c)	17362	N/A	N/A	956	0	1757	0	0	150	0	N/A
UK											
Number exported by India	83929	77529	110273	84204	106497	102964	20302	33885	10913	7000	1228
Number imported from India (d)	N/A	N/A	N/A	N/A	N/A	88280	29851	23364	11009	8470	2008
USA											
Number exported from India	260114	304458	267811	17021	17966	43015	25	802	8839	3221	0
Number imported from India	209758 (e)	185525 (f)	236389 (g)	0 (h)	446 (h)	N/A	N/A	N/A	2487 ⁺ (i)	N/A	N/A

(a) Wild Bird Society of Japan (1978) (b) derived from Malaysian, Annual Statistics of External Trade, Department of Statistics, Kuala Lumpur (c) derived from External Trade Statistics, Dept of Statistics, Singapore (d) derived from External Trade Statistics, HM Customs & Excise Statistical Office, Southend-on-Sea (e) Clapp and Banks (1973a) (f) Clapp and Banks (1973b) (g) Clapp (1975) (h) Greenhall (1976) (i) Nilsson G. (1981). N/A = not available.

FIG. 2 - Value of Birds Exported by India to Selected countries, 1970-1980



were soft-billed passerines, with a smaller selection of water birds (14.7%), birds of prey (11.2%), and seed-eating passerines (7.3%). The number of species of near-passerines, owls, parrots, pigeons, and gamebirds was very small. The quantity of each species group exported is

The majority of the birds exported were widely distributed and common species such as the Red avadavat and Black-headed Mannikin or locally common ones such as the Hill mynah (Fig. 3).

TABLE 6

Price Chain for Birds Transported from India (£ Sterling)

	A	B	C	D
Spotted mannikin (<i>Lonchura punctulata</i>)	0.01	0.02	0.05	3.00
Ring-necked parakeet (<i>Psittacula krameri</i>)	0.07		0.30	16.00
White-rumped shama (<i>Copsychus malabaricus</i>)	0.60		3.00	38.00
Purple gallinule (<i>Porphyrio porphyrio</i>)	0.85		4.40	50.00

A = Trapper, B = Middleman, C = Exporter, D = Retailer

not completely known, but in 1976 Japan imported from India 92% seed-eating passerines, 7% parrots, 1% Hill mynahs, 0.1% pigeons, 0.04% birds of prey, and 0.1% unidentified (Wild Bird Society of Japan, 1978). From 1970-72, the USA imported from India 93.5% seed-eating passerines, 3.2% soft-billed passerines, 3% parrots, 0.09% birds of prey, 0.07% owls, and small numbers of waterbirds, near-passerines and game birds.

EXPORT RESTRICTIONS

The export of birds during the period under review was controlled by the Exports (Control) Order (made under the Imports and Exports (Control) Act, 1947). The Order has a schedule of commodities subject to control which consists of two parts and is revised annually. In 1968, Part A listed 9 species, the export of which was not normally allowed. Part B listed 5 groups covering 13 species, the export of which was allowed on merits or subject to specified conditions. By 1973, there were 27 species listed in Part A, and 37 groups covering 385 species in Part B. In 1974, a further 5 species were added to Part A.

By 1977, the revisions had taken into account some of the requirements of CITES, and 44 groups consisting of 140 species from 14 families were listed on Part A, with 31 groups consisting of 278 species from 26 families on Part B. In 1978, a further 114 species were added to Part B. This total of 529 species from 43 different families still left 631 species in 57 families completely uncontrolled, including two listed in CITES Appendix II: Eurasian spoonbill *Platalea leucorodia*, and Brown-headed gull *Larus brunicephalus*. This situation was rectified by the 1979 amendment which reversed the lists in the Schedule. Only 212 species in 15 families remained in Part B and could therefore still be exported. All other species were included in Part A (Inskipp, 1981). In 1981 Part B was revised and amended: 132 species were transferred to Part A including all sunbirds (Nectariniidae)

and woodpeckers (Picidae) and most finches (Fringillidae); 85 species were transferred from Part A to Part B including the munias (=mannikins) and all babblers (Timaliidae) (Table 8).

EXPORT OF THREATENED SPECIES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), was ratified by India on 20 July 1976, and there was no export control on some of the species listed in the Appendices prior to that date. However, a summary of CITES listed species exported since 1970 (Table 7) gives some idea of the past trade.

Some of the species were also on Part A of the 1968 Exports (Control) Order schedule. One exported species, the Satyr tragopan *Tragopan satyra*, was listed in Part A of the 1968 schedule but is not included in the CITES Appendices. Three species are on Appendix I of CITES: the Imperial eagle, the Peregrine falcon *Falco peregrinus*, and the White-winged wood duck *Cairina scutulata*. The Imperial eagle *Aquila heliaca* is a local and probably uncommon winter visitor to the northwest part of the country - the four imported by the UK appear to have entered the country unlicensed. The total of at least 176 Peregrines in 7 years gives cause for concern because of the severely reduced populations in many areas of the world. No White-winged wood ducks have been exported other than a small number in 1970 for a captive

breeding programme in the UK. Of the 18 species on Appendix II, none is a particularly threatened species in India, although the Saker falcon *Falco cherrug* is a scarce visitor. The total of at least 84 Eurasian spoonbills indicates an appreciable trade in this species, which is likely to be more restricted by habitat in India than Ali & Ripley (Volume 1, 1968) and Cramp & Simmons (1977) indicate. The Narcondam hornbill *Rhyticeros narcondami* is endemic to Narcondam Island, a small outlying island of the Andaman group. The species is confined to an area of about 7 sq. km, but was still plentiful in 1972 (Abdulali, 1974). Any trade at all could quickly affect the population.

The export total during 1970 to 1977 (Table 7) of at least 637 birds of 7 species listed on Part A of the Export (Control) Order 1968 is quite alarming, especially when it is likely that some of the 446 unidentified falcons from India handled by the RSPCA were also of List A species. The number of Laggar falcons *Falco jugger* exported must have been enormous if the UK, USA and the Federal Republic of Germany imported at least 331. The 42 going to Germany (and also 10 Peregrines) were falsely described on the documents as "ravens", presumably to deceive the Indian authorities (Inskipp and Thomas, 1976).

There are a few discrepancies between the birds handled by the RSPCA and the UK/USA recorded imports (Table 7). The Imperial eagles are mentioned above, but there were also 7 Laggar falcons handled as UK imports in 1974 when only 2 were licensed. Of those bound for the USA, the RSPCA handled 23 Northern sparrowhawks *Accipiter nisus* and 15 Red-thighed falconets *Microhierax caerulescens*, but none were recorded as imports.

Fig. 3 - Distribution in India of Seven Bird Species Exported for the Cage Bird Trade

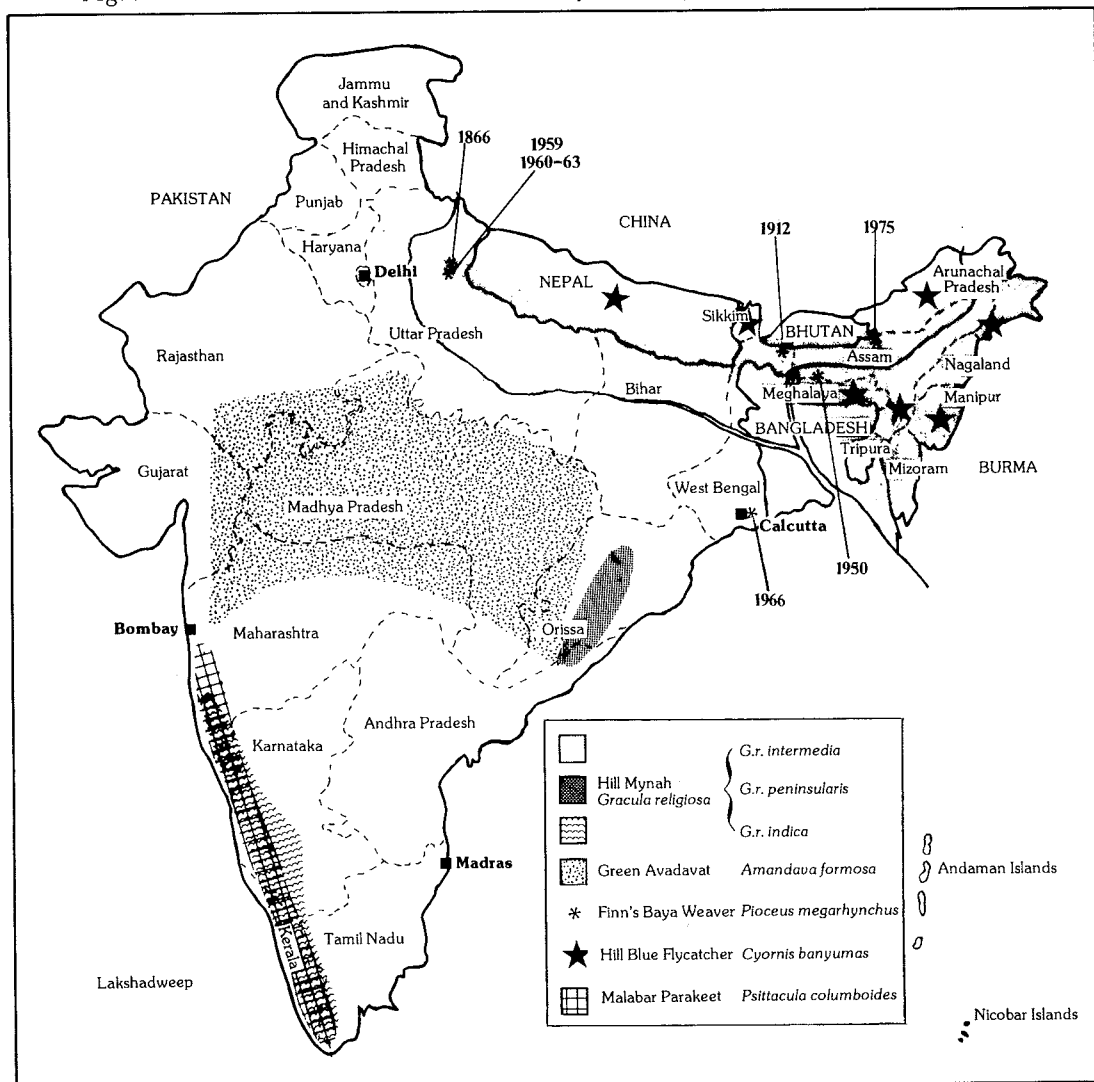


TABLE 7

Export from India of Birds Controlled by CITES or Indian Export Legislation

Species	Exports (Control) Order, 1968 List A	CITES Appendices	Handled by RSPCA at Heathrow(a)	US Import(b)	UK Import(c)	Japan Import(d)
Black stork <u>Ciconia nigra</u>		II	2 UK (1973) 13 DE (1976)		4 (1977)	
White-winged wood duck <u>Calrina scutulata</u>	X	I			(1970 for breeding)(e)	
Eurasian spoonbill <u>Platalea leucorodia</u>		II	21 UK (1971-75) 14 US (1972-73) 11 DE (1973-75) 28 FR (1973-76) 3 IT (1974) 2 ES (1976)	5 (1971 -72)	5 (1977)	
Pallas's fishing eagle <u>Haliaeetus leucoryphus</u>		II		2 (1970)		
Northern sparrowhawk <u>Accipiter nisus</u>		II	23 US (1970-72) 8 ES (1970) 8 NL (1973)			
Spotted eagle <u>Aquila clanga</u>		II	1 BE (1976)			
Lesser spotted eagle <u>Aquila pomarina</u>		II	2 NL (1973) 2 BE (1976)			
Tawny eagle <u>Aquila rapax</u>		II	5 UK (1970-75) 5 US (1970-71) 4 FR (1971) 34 BE (1974-76) 6 AT (1974)	24 (1970 -72)	2 (1973 -74)	
Imperial eagle <u>Aquila heliaca</u>		I	4 UK (1971)			
Red-thighed falconet <u>Microhierax caerulescens</u>		II	6 UK (1970) 26 NL (1970-72) 15 US (1971)			
Falcon <u>Falco</u> sp.		II	137 UK (1970-75) 199 US (1970-74) 15 NL (1970-72) 21 DE (1972-74) 1 CN (1970) 2 FR (1972-73) 23 BE (1972-76) 48 IT (1973-75)			
Common kestrel <u>Falco tinnunculus</u>		II	5 UK (1970) 40 US (1970-72) 8 DE (1972)	74 (1970 -71)	13 (1970 -72)	55 (1977)
Lesser kestrel <u>Falco naumanni</u>		II		21 (1970 -72)		

Export from India of Birds Controlled by CITES or Indian Export Legislation (ctd)

Species	Exports (Control) Order, 1968 List A	CITES Appendices	Handled by RSPCA at Heathrow(a)	US Import(b)	UK Import(c)	Japan Import(d)
Red-headed falcon <u>Falco chicquera</u>	X	II	15 US (1970-72) 5 DE (1972-75) 1 IT (1973) 1 BE (1973)	96 (1970 -72)	19 (1971 -76)	
Laggar falcon <u>Falco jugger</u>	X	II	4 US (1971-72) 9 UK (1972-74) 6 BE (1973) 2 AT (1973) 5 IT (1974-76) 42 DE (1976)	144 (1970 -72)	132 (1971 -77)	
Saker falcon <u>Falco cherrug</u>	X	II		4 (1970 -71)		
Peregrine falcon <u>Falco peregrinus</u>	X	I	3 US (1970-71) 11 DE (1973-76) 1 IT (1976)	30 (1970 -72)	7 (1972 -75)	127 (1973 -76)
Satyr tragopan <u>Tragopan satyra</u>	X		4 BE (1974)			
Grey peacock-pheasant <u>Polyplectron bicalcaratum</u>		II		2 (1970)		
Northern eagle owl <u>Bubo bubo</u>		II	3 UK (1970)	3 (1970 -71)		
Narcondam hornbill <u>Rhyticeros narcondami</u>	X	II				zoo import 1974 (f)
<u>Country Codes</u>			<u>Footnotes</u>			
AT - Austria BE - Belgium CN - China, People's Republic DE - Federal Republic of Germany ES - Spain FR - France IT - Italy NL - Netherlands UK - United Kingdom US - USA			a - Inskipp (1975) and Inskipp & Thomas (1976). b - Clapp & Banks (1973 a and b), Clapp (1975). c - Home Office and Scottish Home & Health Dept (1970-75), Dept of Environment (1976-77). d - Wild Bird Society of Japan (1978). e - Mackenzie and Kear (1976). f - Anon (1975).			

There were also 20 kestrels in 1971 when none were imported, but most of these could be accounted for by the 18 Lesser kestrels Falco naumanni imported.

Some other rare or uncommon species not listed by CITES have also been exported. Rothschild's parakeet Psittacula intermedia, known for certain only from six skins originating from an unknown part of India in the last century, may be a hybrid between two common species (Husain, 1959; Forshaw, 1973), or a distinct species with very localized distribution (Biswas, 1959). In 1975, one was reported in captivity in India (Sane, 1975), and in 1976, one was offered for sale in the UK, the advertisement stating that it was "probably the only known specimen in captivity in the world". If it is a true species, it must be extremely rare, so to prevent its possible exploitation by trade, it should be included in Appendix I of CITES.

The Green avadavat Amandava formosa is an endemic species which is very local and rather scarce on the

Deccan plateau (Fig. 3). It is rather delicate and difficult to acclimatize in captivity in temperate countries (Avon et al, 1974), but quite large numbers were regularly exported - 0.4% of all US imports 1970-72, and at least 13,580 recorded by the RSPCA at Heathrow 1974-76 (this is strictly a minimum figure, because during that period, over 400,000 unidentified seed-eating passerines were recorded). It is now included in Part A of the Exports (Control) Order schedule.

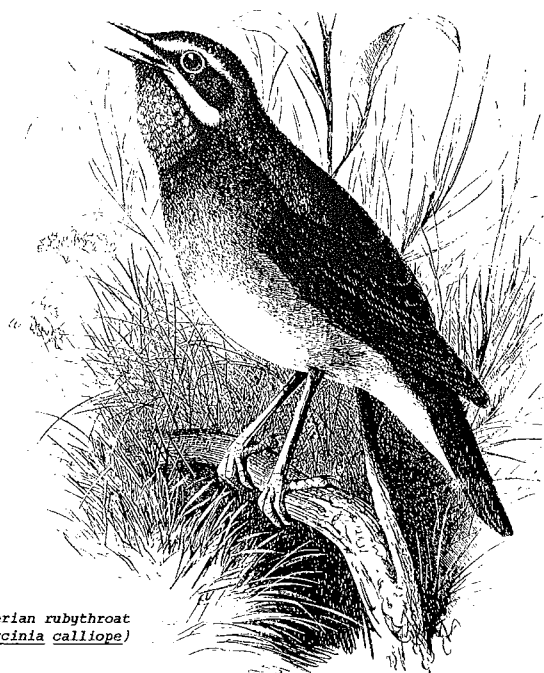
Finn's baya weaver Ploceus megarhynchus is another endemic seed-eater confined to a few tiny disjunct areas in northern India (Fig. 3). It was first recorded in 1866 when two non-breeding specimens were procured in the Uttar Pradesh foothills (Hume, 1869). A breeding colony of at least 20 pairs was discovered in 1912 in the Bengal duars (O'Donel, 1916; Abdulali, 1952 & 1960), but nothing has been reported about it subsequently. In 1950 "a good series" of specimens in non-breeding plumage was collected by W. Koelz in western Assam (Abdulali, 1952),

TABLE 8

Birds that may be exported from India
(from Export Policy 1981-82)

SPECIES or FAMILY	NO. of SPECIES
Baya (other than Finn's baya) (<i>Ploceus philippinus</i>)	1
Bulbuls (species of Red vented, White-cheeked and White-browed bulbuls) (<i>Pycnonotus cafer</i> , <i>leucogenys</i> and <i>luteolus</i>)	3
Munias (except Red munias and Green munias, artificially coloured or bleached birds) (<i>Lonchura</i> spp., <i>Eudice malabarica</i>)	5
Mynas (Common mynas, Bank mynas and Black headed mynas only) (<i>Acridotheres tristis</i> and <i>ginginianus</i> , <i>Sturnus pagodarum</i>)	3
Sparrows (House sparrows and Spanish sparrows) (<i>Passer domesticus</i> and <i>hispaniolensis</i>)	2
Sparrows (Yellow-throated) (<i>Petronia xanthocollis</i>)	1
Babblers (Timaliidae)	58
Bee eaters (<i>Nyctyornis athertoni</i> , <i>Merops</i> spp.)	6
Bluethroat (<i>Luscinia svecica</i>)	1
Buntings (<i>Melophus lathamii</i> , <i>Emberiza</i> spp.)	15
Finches (Rosefinch, Himalayan greenfinch) <i>Carpodacus erythrinus</i> , <i>Carduelis spinoides</i>)	2
Magpies (<i>Urocissa</i> spp., <i>Cissa chinensis</i> , <i>Pica pica</i>)	4
Red-billed leiothrix (<i>Leiothrix lutea</i>)	1
Pittas (<i>Pitta</i> spp.)	5
Parakeets (except Blue-winged, Slaty headed and Rothschild's parakeets) (<i>Psittacula</i> spp. except <i>columboides</i> , <i>himalayana</i> and <i>intermedia</i>)	8
Indian robin (<i>Saxicoloides fulicata</i>)	1
Rubythroats (<i>Luscinia calliope</i> and <i>pectoralis</i>)	2
Sibias (<i>Heterophasia</i> spp.)	5
Sivas (<i>Minla</i> spp.)	3
Silver-eared mesia (<i>Leiothrix argenteauris</i>)	1
Thrushes (genera <i>Turdus</i> , <i>Myiophonus</i> , <i>Zoothera</i> , <i>Monticola</i>)	27
Tree pies (except Southern tree pie) (<i>Dendrocitta</i> spp. except <i>D. leucogastra</i>)	4
White-eyes (<i>Zosterops palpebrosa</i>)	1
Yuhinas (<i>Yuhina</i> spp.)	6
TOTAL	165

but whether they also bred in that area is apparently not known. In 1959 several breeding colonies were discovered in the Kumaon Terai not far from where the first specimens were obtained (Ali & Crook, 1959). In the same area in 1961, twenty-one colonies totalling about 800 nests were found (Ambedkar, 1968), and a few further colonies were noted in 1962-63. A note that one of these colonies (containing about 50 nests) no longer existed in 1968 is the only later information from the area. In 1966 two colonies with a total of about 30 nests were found in the Salt Lake area near Calcutta (Saha, 1967), but much of this habitat has been drained and built on, and it is unlikely that the bird still breeds there. In 1975, a colony containing 24



Siberian rubythroat
(*Luscinia calliope*)

nests was discovered in eastern Assam (Saha, 1976). The species seems to be confined mainly to areas of grass jungle, especially elephant grass (*Imperata/Saccharum*) - a type of habitat that is being increasingly cleared and cultivated by the spreading human settlements. It is apparent that the status of this species is very poorly known - there may be more undiscovered colonies, but it must be extremely locally distributed with a small total population. It has been exported over a period of many years - as early as 1901, several were exhibited in the UK (Abdulali, 1952), and in 1976-77, several consignments were handled by the RSPCA at Heathrow. Its export was apparently banned about 1955 because of its rarity but by 1968 it was completely decontrolled again, and in 1979 it was one of the few species permitted for export. It has now been added to Part A of the Exports (Control) Order Schedule.

The Hill blue flycatcher *Cyornis banyumas* is a species with only a small number of records in northeast India (Fig. 3). A few individuals have appeared at Heathrow in consignments of mixed flycatchers, and it is possible they are locally common in an area unknown to ornithologists. All flycatchers are now included in Part A of the Exports (Control) Order Schedule.

The Siberian rubythroat *Luscinia calliope*, is an "uncommon" winter visitor to eastern India (Ali & Ripley, 1973). However, quite large numbers have been exported - 478 imported by Japan from India in 1975-76 and a minimum of 243 handled by the RSPCA at Heathrow in the same period. It is possible that its skulking habits mask its true frequency in bird-trapping areas such as Bihar.

Of the total of 48 species endemic to (found only in) India, 12 are known to have been exported since 1970. Four of these have already been mentioned, and of the others, only two have been exported in any quantity. The Malabar parakeet *Psittacula columboides* is restricted to southwest India (Fig. 3), but it is not uncommon locally within its range. It illustrates that some species are trapped well away from the main catching areas if the demand is sufficient to justify the extra expense involved. The Andaman starling *Sturnus erythropygius*, is one of 14 species confined to the Andaman and Nicobar Islands in the Bay of Bengal. Despite its relative inaccessibility to the trade, it remained a popular avicultural subject - presumably because of its attractive appearance.

There are a further 50 species recorded in India which are endemic to the Indian sub-continent, i.e. they also occur in Bangladesh, Bhutan, Nepal, Pakistan or Sri Lanka. Of these, 16 are known to have been exported since 1970, but only three in any quantity: the

Blossom-headed parakeet Psittacula cyanocephala, the Ashycrowned finchlark Eremopterix grisea, and the Black-breasted weaver Ploceus benghalensis.

REFERENCES

- Abdulali, Humayun (1952):
Finn's Baya (Ploceus megarhynchus Hume), J. Bombay nat. Hist. Soc. 51:200-204.
- Abdulali, Humayun (1960):
A new race of Finn's Baya (Ploceus megarhynchus Hume) J. Bombay nat. Hist. Soc. 57:659-662.
- Abdulali, Humayun (1978):
The Fauna of Narcondam Island Part I. Birds. In A Bundle of Feathers, OUP, Delhi.
- Ali, Salim, and Crook, J.H. (1959):
Observations on Finn's Baya (Ploceus megarhynchus Hume) rediscovered in the Kumaon Terai, 1959. J. Bombay nat. Hist. Soc. 56:457-483.
- Ali, Salim & Ripley, S.D. (1968-74):
Handbook of the Birds of India and Pakistan (10 vols) Oxford University Press, Bombay.
- Ambedkar, V.C. (1968):
Observation on the Breeding Biology of Finn's Baya (Ploceus megarhynchus Hume) in the Kumaon Terai, J. Bombay nat. Hist. Soc. 65:596-607.
- Anon (1975):
Guide to zoos, bird gardens and wildlife parks. Cage and Aviary Birds, March 27 1975.
- Anon (1978):
Passage from India. Birds 7(2):24-25.
- Avon, D., Tilford, T., Woolham, F. (1974):
Aviary Birds in Colour. Blandford, London, 176 pp.
- Bertram, B. (1968):
Hill Mynahs and the trade in them from India. Avic. Mag. 75:253-255
- Biswas, Biswamoy (1959):
On the parakeet Psittacula intermedia (Rothschild) (Aves. Psittacidae). J. Bombay nat. Hist. Soc. 56: 558-562.
- Bruggers, R.L. (1982):
The Exportation of Cage Birds from Senegal. Traffic Bulletin 4(2):12-22
- Burton, J.A. & Inskipp, T.P. (1979)
Birds in Peril: The threat of international demand. Encyclopedia of Birds Vol. 6.
- Clapp, R.B. (1975):
Birds imported into the United States in 1972. USDI Fish and Wildlife Service, Spec. Sci. Rept. Wildlife No. 193. Washington DC.
- Clapp, R.B. and Banks, R.C. (1973a):
Birds imported into the United States in 1970. USDI Bureau of Sport, Fisheries and Wildlife, Washington DC Spec. Sci. Rept. Wildlife No. 164. 102 pp.
- Clapp, R.B. and Banks, R.C. (1973b):
Birds imported into the United States in 1971. USDI Bureau of Sport, Fisheries and Wildlife. Spec. Sci. Rept. Wildlife No. 170. Washington DC 99 pp.
- Cramp, S. & Simmons, K.E.L. (1977):
Handbook of the Birds of Europe, the Middle East and North Africa. Vol. 1. Oxford University Press, London.
- Curry-Lindahl, K. (1972):
Conservation for Survival. Gollancz, London. 335 pp.
- Datta, Ella (1976):
Sending our feathered friends to the grave. The Economic Times (India), July 25.
- Forshaw, J.M (1973):
Parrots of the World. Lansdowne, Melbourne, 584 pp.
- Freeman, M. (1973):
Parakeets from forest to pet shop. Animals 15(3):122-124.
- Greenhall, A.M. (1976):
Birds imported into the United States in 1973 & 1974. US Fish & Wildlife Service. Wildlife Leaflet No. 511. 7 pp.
- Hume, A.O. (1869):
Letter. Ibis (N.S.) 5:355-357.
- Husain, K.Z. (1959):
Is Psittacula intermedia (Rothschild) a Valid Species? Bull. Brit. Orn. Club 79(6):89-92.
- Inskipp, T.P. (1975):
All Heaven in a Rage. A Study of Importation of Wild Birds into the United Kingdom. RSPB 41 pp.
- Inskipp, T.P. (1979)a:
Trade in Birds in India. RSPCA Today, Winter 1979/1980:2-13
- Inskipp, T.P. (1979)b:
The Trapping and Export of Birds from India. XIII Bulletin of the International Council for Bird Preservation:109-113
- Inskipp, T.P. (1981):
The Indian Bird Trade. In Nilsson, G. The Bird Business. A Study of the Commercial Cage Bird Trade. Animal Welfare Institute. 121 pp.
- Inskipp, T.P. & Thomas, G.J. (1976):
Airborne Birds. A Further Study of Importation of Wild Birds into the United Kingdom. RSPB 25 pp.
- Keymer, I. (1972):
The unsuitability of non-domesticated animals as pets. Vet. Rec., 91:373-381.
- King, W.B. (1974):
Aspects of international trade in Indonesian birds. Int. Zoo Yearbook 14:56-61.
- Lawyer, Ave (1977):
Where birds of every feather choke together. Junior Society Magazine, Calcutta. March 26-April 8, 4 pp.
- Mackenzie, M.J.S. & Kear, J. (1976):
The white-winged wood duck. Wildfowl 27:5-17.
- Nichol, J. (1978):
So you fancy frogs' legs? Compassion, Spring 1978:6-9.
- Nilsson, G. (1981):
The Bird Business. A Study of the Commercial Cage Bird Trade. Animal Welfare Institute. pp. ix + 121.
- O'Donel, H.V. (1916):
The Eastern Baya Ploceus megarhynchus nesting in the same tree as the Jungle Bee (Apis indicus). J. Bombay nat. Hist. Soc. 24:821.
- Platt, C. (1974):
Transport of live animals by air from Calcutta and Bangkok airports. ISPA 16 pp.
- Putman, J.J. (1976):
India struggles to save her wildlife. Nat. Geographic; 150(3):298-343.
- Robbins, C. (1974):
Death Trail to the Pet Shop. Observer, 24 November, 5 pp.
- Rogers, C.H. (1969):
Parrot Guide pp.233-238. The Pet Library, New York, 250 pp.
- Roots, C. (1970a):
Soft-billed Birds. Gifford, London, 158 pp.
- Roots, C. (1970b):
Wild Harvest. Lutterworth Press, London, 236 pp.
- Ruelle, P.A. Bruggers, R.L. (1983):
Senegal's Trade in Cage Birds, 1979-81. USDI Fish and Wildlife Service, Wildlife Leaflet 515, 11 pp.
- Saha, S.S. (1967):
The Finn's Baya (Ploceus megarhynchus Hume) (Aves: Passeriformes: Ploceidae), and its breeding colony near Calcutta. Proc. Zool. Soc. Calcutta 20:181-195.
- Saha, S.S. (1976):
Occurrence of Finn's Baya (Ploceus megarhynchus Hume) in Darrang District, Assam. J. Bombay nat. Hist. Soc. 73:527-529.
- Sane, S.R. (1975):
Rothschild's Parakeet. Avic. Mag. 79(6):238-239.
- Voous, K.H. (1977):
List of Recent Holarctic Bird Species. BOU, London 85 pp.
- Wild Bird Society of Japan (1978):
Reference Materials of the Symposium of the Washington Convention. 25 pp.

APPENDIX I - Number and Value of Birds Exported from India, 1970 - 1980

	1970 Number (Value - Rs)	1971 Number	1972 Number	1973 Number	1974 Number	1975 Number	1976 Number	1977 Number	1978 Number	1979 Number	1980 Number
Afghanistan					3250 (8117)	4000 (11860)	500 (1827)	3120 (8900)			
Australia	94 (940)	642 (6915)	109 (5836)	502 (8962)		850 (13116)	514 (5562)	36 (882)	500 (5100)	500 (5100)	
Austria	475 (4226)	456 (5506)	2160 (19947)	505 (8192)	564 (7065)	3325 (35841)	465 (6876)	461 (9509)	745 (9078)	514 (5133)	657 (19765)
Bahrain	178 (824)		1606 (11830)	286 (6250)	904 (14852)	250 (6012)	770 (7520)	356 (7605)	48 (1352)		
Bangladesh								300 (680)			
Belgium	96805 (321310)	180541 (399649)	245489 (505919)	142434 (359798)	146808 (396374)	105164 (407801)	127600 (506014)	112154 (403277)	13385 (112808)	4079 (36126)	3303 (47242)
Bulgaria	525 (780)		754 (2040)	150 (4674)		20000 (247600)					
Canada	419 (1983)	1101 (5418)	32 (1152)		2770 (3843)	634 (2760)	160 (11510)				
Cape Verde Is.											
Channel Is. (UK)											
China										500 (5100)	
Czechoslovakia			430 (5082)								
Denmark	8724 (58945)	12607 (72902)	14837 (146227)	27172 (194728)	9963 (646393)	7161 (28398)	3410 (23643)	3545 (29823)	815 (19962)	1372 (13971)	90 (4421)
Dubai		13 (278)	5485 (13932)	1486 (4262)							
Egypt	52 (2432)	28 (421)	480 (935)								480 (8080)
Finland	8865 (14927)				4000 (10100)						
France	209771 (495436)	249303 (611505)	254409 (670546)	173313 (505790)	186708 (536445)	144042 (415507)	126306 (423810)	245692 (826878)	7624 (70648)	11082 (117096)	1379 (18579)
German Dem. Rep.	74 (1158)	1418 (17578)		4500 (9855)		1096 (9302)	288 (3698)		450 (2977)		
Germany, Fed. Rep. of	93441 (457918)	146077 (510168)	112603 (638924)	113613 (721103)	131607 (548254)	134924 (764003)	105288 (858360)	102452 (636123)	30575 (439195)	8991 (161061)	6099 (71625)
Greece	796 (5657)	8680 (23625)			60 (5061)	1092 (17481)	614 (21467)		200 (5854)	1124 (11961)	
Hong Kong	19132 (58001)	4698 (27684)	6160 (42619)	4266 (23082)	7069 (78103)	4244 (52818)	2932 (76006)	18522 (115440)	9137 (123070)	3413 (70048)	1138 (15542)
Hungary		135 (800)			115 (7470)						
Indonesia				320 (3201)						674 (4273)	

Number and Value of Birds Exported from India, 1970 - 1980 (ctd 3)

	1970 Number (Value - Rs)	1971 Number	1972 Number	1973 Number	1974 Number	1975 Number	1976 Number	1977 Number	1978 Number	1979 Number	1980 Number
Pakistan									2545 (10340)		
Panama	70 (553)							1068 (6767)			
Philippines											
Portugal						1480 (6354)					
Qatar	7 (100)		54 (1555)	159 (390)	578 (6795)		30000 (52163)	33400 (40087)	6113 (6755)		
Saudi Arabia							725	1158	668		82 (3200)
Singapore	6296 (44255)	4604 (13851)	5754 (20974)	990 (9186)	9745 (84366)	1528 (11176)	306	200	597		
Spain	5618 (20048)	7293 (25456)	4813 (12644)	3104 (18751)	1455 (2921)	11627 (43485)	21015 (90139)	16784 (122989)	4998	11125 (30330)	860 (25286)
Sri Lanka	138 (4580)			9 (265)							
Sweden	318 (2822)	752 (13482)	2162 (20658)	2755 (48400)	1142 (20769)		1739 (22239)	9450 (59911)	2401 (43474)		345 (8400)
Switzerland	999 (5162)	1405 (12895)	1532 (17383)	6325 (49754)	9745 (84366)	4077 (16875)	161		66	1000	125 (4160)
Taiwan	40 (2733)		865 (8577)	1730 (25513)	2832 (23517)	1950 (20580)	12975 (226653)	22599 (219787)	15295 (140145)	18037 (275697)	3524 (47276)
Tanzania									1113 (9190)	1040 (11675)	
Thailand	234 (4789)	4540 (3074)	3190 (4275)	839 (12910)	565 (2250)	85 (16575)	4059 (54486)				
Tunisia		825 (1770)									
USSR			136 (21480)	100 (9125)		11505 (91910)	1351 (31365)	10105 (91000)	3000 (5558)	3369 (32451)	5415 (65855)
Utd Arab Emirates (Abu Dhabi)			70 (5301)								
UK	83929 (618531)	77529 (481938)	110273 (661786)	84204 (724723)	106497 (659632)	102964 (663559)	20302 (231888)	33885 (193181)	10913 (167367)	7000 (160301)	1228 (41956)
USA	260114 (968912)	304458 (1295520)	267811 (477372)	17021 (222931)	17966 (483100)	43015 (422446)	25 (446)	802 (8917)	8839 (158454)	3221 (59420)	
Uruguay	1089 (4743)										
Vietnam						15000 (40000)			16480 (164800)		
Yemen Arab Rep.											
Yugoslavia	770 (14000)										
Zambia	9 (216)										
TOTALS	1854328 (5674334)	2233024 (6446883)	2350667 (7449616)	1598319 (7583355)	1733545 (8651001)	1760045 (9095884)	1437918 (9535010)	1376032 (7147044)	268603 (3075520)	119176 (1765074)	41867 (546639)
Exchange rate (Rs to £1)	18.03	18.60	18.69	18.75	18.75	18.28	14.65	15.16	16.40	N/A	18.30

APPENDIX 2 - Families and number of species of birds exported from India from 1970 - 1982

	No. of species recorded in India		No. of species recorded in India		No. of species exported		No. of species exported		No. of species recorded in India		No. of species exported	
	Breeding	Non-Breeding	Breeding	Non-Breeding	Breeding	Non-Breeding	Breeding	Non-Breeding	Breeding	Non-Breeding	Breeding	Non-Breeding
Caviidae	1	-	1	9	-	-	-	-	62 (1)	27	2	-
Podicipedidae	2	-	14	8	-	-	-	-	30 (3)	3	10	1
Procellariidae	-	-	1	-	-	-	-	-	3	-	1	-
Hydrobatidae	2	-	3	4	-	-	-	-	2	-	2	-
Phaethontidae	2	-	27 (3)	1	-	8 (1)	-	-	1	-	-	-
Sulidae	3	-	12 (3)	-	-	10 (3)	-	-	119 (6)	-	28	-
Phalacrocoracidae	3	-	21	-	-	2	-	-	4	-	1	-
Anhingidae	1	-	3	-	-	1	-	-	12 (1)	-	5	-
Pelecanidae	2	-	22 (3)	3	-	8	-	-	7	-	3	-
Fregatidae	-	-	2	-	-	-	-	-	1	-	-	-
Ardeidae	18	-	6	1	-	-	-	-	5	-	1	-
Ciconiidae	6	2	15	-	-	-	-	-	1	1	1	-
Threskiornithidae	4	-	3	-	-	-	-	-	14 (1)	-	6	-
Phoenicopteridae	2	-	15	-	-	-	-	-	8	-	1	-
Anatidae	13	28	12	-	-	1	-	-	1	-	1	-
Accipitridae	41 (3)	10	6	-	-	1	-	-	4	-	1	-
Pandionidae	1	-	3	-	-	1	-	-	5	-	3	-
Falconidae	8	5	3	-	-	1	-	-	9 (1)	-	4	-
Megapodiidae	1	-	8 (1)	-	-	3 (1)	-	-	2	-	-	-
Phasianidae	43 (5)	1	9 (1)	-	-	6 (1)	-	-	20 (2)	1	9 (1)	-
Rallidae	14 (1)	2	1	-	-	-	-	-	14 (1)	3	8 (1)	1
Turnicidae	3	1	31	-	-	4	-	-	6	5	2	1
Gruidae	2	4	2	-	-	-	-	-	4 (1)	-	4 (1)	-
Helionithidae	1	-	4	-	-	3	-	-	8 (1)	-	6 (1)	-
Otididae	3	2	16 (2)	3	-	1	-	-	30	11	5	-
Jacanidae	2	-	14	-	-	-	-	-	5	11	1	-
Rostratulidae	1	-	13 (1)	5	-	5	-	-	-	-	-	-
Haematopodidae	-	-	15	1	-	5	-	-	-	-	-	-
Ibidorhynchidae	1	-	18 (3)	-	-	10 (1)	-	-	4 (1)	-	4 (1)	-
Recurvirostridae	2	-	5	-	-	4	-	-	6	-	2	-
Dromadidae	-	1	1	-	-	1	-	-	4 (1)	-	6 (1)	-
Burhinidae	3	-	1	2	-	-	-	-	11	-	5	-
Glareolidae	4 (1)	2	2	-	-	-	-	-	5	11	1	-
Charadriidae	6	13	1	-	-	-	-	-	-	-	-	-
Scolopacidae	6	32	5	3	-	-	-	-	932 (48)	250	276 (12)	17
Stercorariidae	-	4	64 (3)	20	-	25	-	-	1182	-	293	-
Total												
Grand Totals												

Figures in brackets relate to endemic species.
 Distribution details from Ali & Ripley (1968-74).
 Nomenclature mainly follows Voous (1977) first and then Ali & Ripley (1968-74).

BUCEROTIDAE ctd		f-E f-R		PYCNOTIDAE ctd		f-E f-R	
Narcondam hornbill	<u>Rhyticeros narcondami</u>	ELC In UK zoo		Ashy bulbul	LC +	LC +	18
CAPITONIDAE				Black bulbul	LC +	LC +	25
Great barbet	<u>Megalaima virens</u>	LC +	10 /	Yellow-browed bulbul	ICL In UK zoo	ICL In UK zoo	/
Brown headed barbet	<u>M. zeylanica</u>	LC Ad'tised UK'78	/	CHLOROPSEIDAE			
Lineated barbet	<u>M. lineata</u>	L *	50 /	Blue-winged leafbird	LC +	LC +	45
White-cheeked barbet	<u>M. viridis</u>	ELC *	/	Gold-fronted leafbird	LC +	LC +	45
Blue-throated barbet	<u>M. asiatica</u>	LC + *	1.5 45	Orange-bellied leafbird	LC + *	LC + *	60
Coppersmith barbet	<u>M. haemacephala</u>	C + *	40	Common iora	C Ad'tised UK'71	C Ad'tised UK'71	/
PICIDAE				IRENIDAE			
Yellow-crowned pied woodpecker	<u>Dendrocopos mahrattensis</u>	C Ad'tised UK'82	140	Fairy bluebird	L +	L +	45
Greater yellow-naped woodpecker	<u>Picus flavinucha</u>	L + *	/	TURDIDAE			
Lesser golden-backed woodpecker	<u>Dinopium benghalense</u>	C +	70	Siberian rubythroat	LUN +	LUN +	1.5 40
Greater golden-backed woodpecker	<u>Chrysocolaptes lucidus</u>	L +	/	Bluetthroat	L +	LC +	/
PITIIDAE				White-tailed rubythroat	L +	L +	/
Indian pitta	<u>Pitta brachyura</u>	L + *	63	Indian blue robin	LC +	LC +	2.5 23
Hooded pitta	<u>P. sordida</u>	L *	43	Orange-flanked bush robin	LC +	LC +	20
Blue-naped pitta	<u>P. nipalensis</u>	L seen C'cutta	77 /	Golden bush robin	L Ad'tised UK'72	L Ad'tised UK'72	/
ALAUDIDAE				Asian magpie-robin	C + *	C + *	40
Ashy-crowned finchlark	<u>Eremopterix grisea</u>	IC +	/	White-rumped shama	L + *	L + *	42
MOTACILLIDAE				Black redstart	LC +	LC +	45
Forest wagtail	<u>Dendronanthus indicus</u>	L seen C'cutta	'77 /	Daurian redstart	L +	L +	95
Yellow wagtail	<u>Motacilla flava</u>	C +	/	Blue-fronted redstart	LC In UK zoo	LC In UK zoo	/
Citrine wagtail	<u>M. citreola</u>	LC +	/	Plumbeous redstart	ICL	ICL	/
White wagtail	<u>M. alba</u>	C +	/	Brown rockchat	LC +	LC +	/
Richard's pipit	<u>Anthus novaeseelandiae</u>	C +	/	Stonechat	LC +	LC +	54
CAMPEPHAGIDAE				Pied bushchat	L +	L +	/
Rosy minivet	<u>Pericrocotus roseus</u>	L +	/	White-capped redstart	LC +	LC +	2 /
Small minivet	<u>P. cinnamomeus</u>	C +	50 /	Indian robin	C + *	C + *	18
Long-tailed minivet	<u>P. ethologus</u>	L +	/	Blue-capped rock thrush	IC +	IC +	20
Short-billed minivet	<u>P. brevirostris</u>	L +	/	Blue rock thrush	LC +	LC +	3 /
Scarlet minivet	<u>P. flammeus</u>	LC +	/	Chestnut-bellied rock thrush	L In UK zoo	L In UK zoo	/
PYCNOTIDAE				Blue whistling thrush	LC + *	LC + *	/
Grey-headed bulbul	<u>Pycnonotus priocephalus</u>	EL In UK zoo		Orange-headed ground thrush	L +	L +	18 /
Black-crested bulbul	<u>P. melanicterus</u>	L + *	45	Tickell's thrush	LC Ad'tised UK'72	LC Ad'tised UK'72	/
Red-whiskered bulbul	<u>P. jocosus</u>	LC +	.60 18	White-collared blackbird	L +	L +	/
White-cheeked bulbul	<u>P. leucogenys</u>	LC + *	.70 18	Grey-winged blackbird	LC Ad'tised UK'72	LC Ad'tised UK'72	/
White-browed bulbul	<u>P. luteolus</u>	IL +	/	Chestnut thrush	L In UK zoo	L In UK zoo	25 /
Red-vented bulbul	<u>P. cafer</u>	C + *	.60 13	SYLVIIDAE			
Mountain bulbul	<u>Hypsipetes maclellandii</u>	IC +	/	Clamorous reed warbler	LC +	LC +	50
				Common tailorbird	C +	C +	/
				MUSCICAPIDAE			
				Red-breasted flycatcher	LCN	LCN	/
				Orange-gorgetted fly-catcher	LC +	LC +	/

Species Exported from India 1970 - 1982 ctd 4

N = non-breeding visitor
 VL = very local
 U = uncommon
 R = rare
 E = endemic to India
 I = endemic to Indian sub-continent

+ = Heathrow 1970-82
 * = US imports 1970-74
 ° = UK imports 1970-77
 / = Advertised UK 1977-82
 £-E = Indian export price
 £-R = 1977-79 retail price

MUSCICAPIDAE ctd

Snowy-browed flycatcher
 Ultramarine flycatcher
 Slaty-blue flycatcher
 Small niltava
 Rufous-bellied niltava
 Bluethroated blue
 flycatcher
 Hill blue flycatcher
 Tickell's blue flycatcher
 Verditer flycatcher

Ficedula hyperythra
F. superciliaris
F. tricolor
Niltava macgrigorae
N. sundara
Cyornis rubeculoides
C. banyumas
C. tickelliae
Muscicapa thalassina

L
 LC +
 LC
 LC + *
 LC +
 LC +
 LC +
 R +
 C + *
 LC +

TIMALIIDAE ctd

Red-billed leiothrix
 Blue-winged minla
 Nepal fulvetta
 Black-capped sibia
 Whiskered yuhina
 Black-chinned yuhina
 Stripe-throated yuhina
 Brown-cheeked fulvetta

Leiothrix lutea
Minla cyanouroptera
Alcippe nipalensis
Heterophasia capistrata
Yuhina flavicollis
Y. nigrimenta
Y. gularis
Alcippe poiocephala

LC + *
 LC +
 LC + *
 LC +
 LC +
 LC +
 LC In UK zoo
 LC In captivity '74
 60

£-E £-R

£-E £-R

RHIPIDURIDAE

White-throated fantail

Rhipidura albicollis

LC +

Black-throated tit

Aegithalos concinnus

LC + °

MONARCHIDAE

Black-naped monarch
 Asian paradise flycatcher

Hypothymis azurea
Terpsiphone paradisi

L +
 LC Ad'tised UK '70 /

Rufous-vented black tit
 Coal tit
 Great tit
 Green-backed tit
 Black-lored tit

Parus rubidiventris
P. ater
P. major
P. monticolus
P. xanthogenys

LC Ad'tised UK '77
 LC In UK zoo
 LC + *
 LC + *
 ICL +
 /
 /

TIMALIIDAE

Spotted babbler
 Rusty-cheeked scimitar
 babbler
 White-browed scimitar
 babbler
 Greater scaly-breasted
 wren babbler
 Black-chinned babbler
 Rufous-bellied babbler
 Chestnut capped babbler
 Yellow-eyed babbler
 Grey-headed parrotbill
 Common babbler
 Large grey babbler
 Jungle babbler
 White-throated laughing-
 thrush
 White-crested laughing-
 thrush

Pellorneum ruficeps
Pomatorhinus erythrogenys
P. schisticeps
Phoebastria albiventris
Stachyris pyrrhops
Dumetia hyperythra
Timalia pileata
Chrysomma sinense
Paradoxornis gularis
Turdoides caudatus
T. malcolmi
T. striatus
Garrulax albogularis

LC +
 LC +
 L +
 LC +
 ICL In UK zoo
 LC Ad'tised UK '72 /
 LC +
 LC +
 LC In UK zoo
 C
 ICL +
 ICL
 LC +
 LC + *
 LC + *
 LC + *
 LC +

Chestnut-bellied
 nuthatch
 White-tailed nuthatch
 Velvet-fronted nuthatch

Sitta castanea
S. himalayensis
S. frontalis

LC +
 LC +
 LC +
 /
 /

REMIZIDAE

Fire-capped tit

Cephalopyrus flammeiceps

L In UK zoo

NECTARINIIDAE

Purple-throated sunbird
 Purple sunbird
 Purple-rumped sunbird
 Crimson sunbird
 Mrs Gould's sunbird
 Streaked spiderhunter

Nectarinia sperata
N. asiatica
N. zeylonica
Aethopyga siparaja
A. gouldiae
Aracinothra magna

L *
 C + *
 LC +
 LC +
 L Ad'tised UK '82 38
 LC +
 /
 /
 28
 50
 38
 35

DICALIIDAE

Fire-breasted flower-
 pecker

Dicaeum ignipectus

LC +

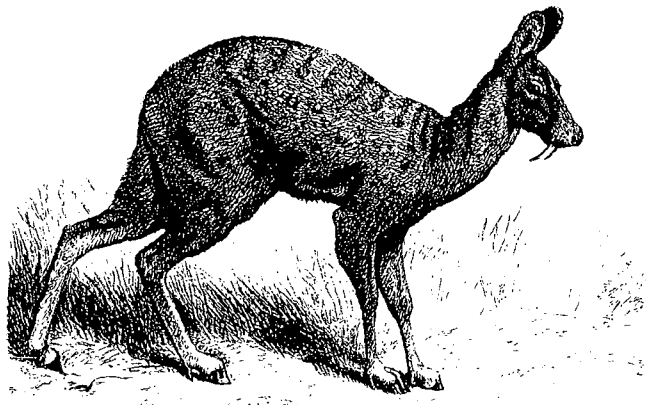
ZOSTEROPIDAE

Oriental white-eye

Zosterops palpebrosa

C + *
 /
 10
 45
 LC In UK zoo
 L + *
 2.5 20
 .25 13

Scent to the Orient

Musk deer (*Moschus moschiferus*)

Japanese sources of musk (from the Musk deer *Moschus* spp.) have changed significantly since 1979.

In October 1981, Tom Milliken drew attention to the large imports of musk to Japan from Nepal, in spite of Nepal's 1973 ban on exports of musk (*Traffic Bulletin* III(5):48-49). Since 1979, imports from Nepal have dropped from 196 kg to just 11 kg in 1982. Thus Nepal has fallen from first to fourth place as a source.

Meanwhile, imports from China have trebled, making it the single most important source in spite of its having imposed a 5-year ban on the killing of musk deer in the Szechuan province in 1981. A large proportion of the Chinese musk comes from the north-eastern provinces which are unaffected by the ban. It is also noteworthy that Japan's imports from Hong Kong and the USSR have doubled. Hong Kong, of course, does not produce its own musk but the USSR has a long history of Musk deer hunting. At the peak of the industry in 1855, 81200 pods were produced (each pod contains about 25g of musk) but this led to a population decline, and the trade had virtually stopped by 1900. Since then, the population has built up and production in 1980 was about 5000 pods (125 kg) but this was estimated to be only 20-25% of the potential sustainable yield.

India banned exports of musk in 1972 and Japan's customs records of imports from there have dwindled to nothing. However, South Korea does record importing 5 kg from India in 1982.

A report received from Dr. G. M. Oza of the Indian Society of Naturalists reminds us that probably only two

EEC Seal Skin Ban Enforced

The directive, banning imports of raw and tanned furskins and other articles from Harp seal pups (whitecoats) and Hooded seal pups (bluebacks) into EEC countries, came into effect on 1 October 1983, and will remain valid for two years. Some Member states have criticised the European Commission for implementing the ban on humanitarian, rather than scientific grounds (i.e. safeguarding the species). As with all Community directives, it will be up to the individual countries to enforce the ban as they see fit and this can be fulfilled by taking administrative measures or by undertakings by importers and other professionals. The primary objective is to ensure that the products concerned are not imported for commercial purposes. Most Member states have already enforced the ban.

out of every five Musk deer poached in India have a musk pod and, in Nepal, Bhutan and Sikkim, only one in four Musk deer caught in snares carries a pod.

In addition, Musk deer farming is practised commercially in China and possibly the USSR. Experimental farming is being carried out in Korea, India and possibly Bhutan and Nepal. The volume of farming in China is not known, but in 1980 there were five farms, one of which held 31 adult male musk deer. Musk is extracted once a year when on average each animal yields 6-8g, which would mean a total production of under 0.25 kg for the farm.

Michael Green, Cambridge University. Dr Lu Hogee, Shanghai University. Tom Milliken Traffic (Japan). G.M. Oza, INSONA.

Bannikov, A.G., S.K. Ustinov & P.N. Lobanov (1980): *The Musk deer Moschus moschiferus in the USSR*, IUCN publication.

De Vos A. (1982): *Deer farming*, FAO Animal production and health paper No. 27. South China Morning Post, 30.3.82.

Quantities of Musk Imported by Japan from Various Countries

Year	China	Hong Kong	India	Nepal	Pakistan	USSR	Misc.	TOTAL (kg)
1974	2	4	16	100	0	0	2	124
1975	0	6	0	99	1	1	2	109
1976	12	9	0	179	0	9	4	213
1977	26	4	0	193	5	0	0	228
1978	12	3	1	232	2	0	3	253
1979	73	46	1	196	3	14	1	334
1980	180	40	0	156	6	16	0	398
1981	240	37	1	25	0	39	1	343
1982	228	87	0	11	0	34	1	361
1983*	136	43	0	11	0	6	0	196*

* Jan - Aug only

Source: Nihon Boeki Geppo

Sierra Leone's Chimps Endangered by Commercial Exploitation

Two recent developments are giving rise to grave concern for the future of the already depleted population of chimpanzees *Pan troglodytes* in Sierra Leone. The most obvious threat is the capture and export to Japan of young chimps for biomedical research, but a plan by the Austrian company IMMUNO AG is adding to the problem. This company is negotiating an agreement with the Sierra Leone Government, to use chimps within the country. Thus they avoid the CITES Appendix I controls that would apply to importing chimps into Austria.

Sierra Leone's chimpanzee population was recently (1980) surveyed by Dr. Geza Teleki, who estimated that no more than 2,000 survive there. Superficially, the Government of Sierra Leone appears to be taking chimp conservation seriously and the species has been used very recently as a symbol of endangered species conservation in a special issue of postage stamps. However, with less than 2,000 wild chimps remaining there, the Government's approval of continued commercial exploitation of wild-caught animals both for exports to Japan and for setting up a biomedical research centre seems rather lackadaisical.

It is noteworthy that chimpanzees taken from the wild are almost invariably infants whose capture requires the killing of the mother. If the infant then dies, the hunter must kill another nursing female; and so the breeding population is reduced.

Exports to Japan

In April 1983, the CITES Secretariat was informed by the French CITES Management Authority that an application had been made to ship 50 chimps in transit through France. The animals were to be exported from Sierra Leone to the KASHO company in Japan, and the French authorities were unable to refuse permission for transshipment through France since CITES does not prohibit transit through a party state, even when the transaction is in apparent violation of the provisions of the Convention.

The CITES Secretariat immediately raised the matter with the Japanese Government but, at the time of going to press, has received no reply.

However, the official Japanese Government customs statistics show that 30 of the chimps have already been imported into Japan, 6 of them in April and a further 24 in May. For these Appendix I imports to be legal under CITES, the Japanese Scientific Authority is required to advise that "the import will be for purposes which are not detrimental to the survival of the species" and the Japanese Management Authority must be satisfied that the animals are "not to be used for primarily commercial purposes". It is hard to imagine how any Authority could meet the CITES requirements in the circumstances applying to this trade. We now know that the animals are to be kept at the Suzuken research facility of a pharmaceutical company, Sanwa Kagaku Kenkyu Jyo, in Kyushu.

In addition, for the export to be legal under CITES, even though Sierra Leone is not a Party to the Convention, the competent authorities in Sierra Leone must certify that the export will not be detrimental to the survival of the species and that the specimens were not obtained in contravention of Sierra Leone's laws for the protection of fauna. Such certification would also seem to be implausible in view of the precarious status of chimp populations in that country and the fact that export of chimps is totally prohibited under the 1972 Wildlife Conservation Act, to say nothing of the Presidential ban imposed in 1981 on all exports of wildlife. Thus, the Japanese imports seem to be clearly in violation of CITES.

WTMU has been informed that a further 20 chimps were exported from Sierra Leone in April/May of this

year, but cannot trace their importation elsewhere. It is suspected that these animals may be in a holding facility, perhaps in a non-CITES country (such as Belgium - see below), awaiting a purchaser in a country that still permits chimp imports.

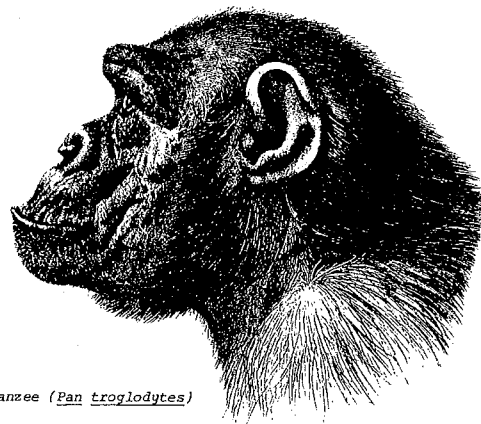
The Austrian Connection

Within a few days of the date on which Austria became a Party to CITES (27 April 1982) the authorities there confiscated twelve chimpanzees being imported at Vienna airport. More recently, an application by the pharmaceutical company IMMUNO AG to import 40 chimpanzees from Belgium was refused. These actions appear to confirm that the Austrian Government is determined to ensure proper implementation of the Convention. However, developments in Sierra Leone contradict this assumption since it appears that the Austrian Consul in Freetown, Sierra Leone, is instrumental in the negotiations to set up a biomedical facility, near Freetown, which will use wild-caught chimps to test hepatitis B vaccine.

The Austrian Consul, Klaus Bieber, was, until 1974, a business partner of Franz Sitter, the Austrian wildlife trader operating from Freetown, whose name has appeared twice before in the *Traffic Bulletin* in connection with chimpanzee exports from Sierra Leone (see I(1):2 and II(8):78). It seems significant that IMMUNO plans to build its facility on the land which Sitter uses as a holding facility for live chimpanzees and other wildlife destined for export, and that Sitter would be the sole supplier of the 50-60 young chimps required each year for the IMMUNO project. The purpose of the project, stated in a letter from Bieber to the Minister of Agriculture and Forestry for Sierra Leone, Abass Bundu, is "to overcome problems in connection with the importation of live chimpanzees" into Austria. It would also be established in contravention of the conservation principles of the World Health Organisation, which is responsible for the control of hepatitis B vaccine. The WHO/ECG Policy Statement on the Use of Primates for biomedical purposes recommends that:

"Endangered, vulnerable and rare species be considered for use in biomedical research projects only if they are obtained from existing self-sustaining captive breeding colonies".

The proposed IMMUNO project is clearly in violation of this recommendation and has been condemned by both conservationists and biomedical laboratories.



Chimpanzee (*Pan troglodytes*)

CITES Secretariat, International Primate Protection League, Japanese Customs Statistics, New Scientist, Sierra Leone Environment and Nature Conservation Association, Traffic (Japan), World Wildlife Fund (Austria), World Wildlife Fund (USA)

* Palm Cockatoos Seized in Singapore . . .

One hundred and twenty-four rare and endangered birds, worth SG\$112,350 were seized by Singapore's Primary Production Department in a house raid on 13 September. 100 Palm cockatoos (*Probosciger aterrimus*), 21 Moluccan cockatoos (*Cacatua moluccensis*), 2 Brahminy kites (*Haliastur indus*) and a Blue-crowned pigeon (*Goura cristata*) were found in wire-mesh cages covered with gunny sacks.

According to Singapore Straits Times (16.9.83), the Palm cockatoos are valued at SG\$1,070 each, the kites at SG\$110 and the pigeon SG\$640 on the black market.

The birds are said to have been smuggled from Indonesia by a businessman at the Barter Trade Centre at Pandan River, Singapore. Our Singapore correspondent, Lee Toh Ming, comments that the Pandan Barter Trade Zone "has always been a problem". The Zone is a free port. It is closed to the public, but Indonesians and other foreign nationals are allowed into the port without a passport or ships' papers and are granted the right to trade, providing they remain within the confines of the port.

However, importation of the birds is an offence under the Wild Animals and Birds Act, and the offender faces a fine of SG\$1000 for each bird.

The seized birds were taken to Jurong Bird Park but the Straits Times of 13 October reports that only three of the birds are still alive: the Brahminy kites and the Blue-crowned pigeon. The zoo vet, Dr Phiru Chelvan claims that all the cockatoos died from Newcastle disease.

. . . and the U.S.

At least two shipments of Palm cockatoos totalling approximately 100 birds were recently seized by law enforcement officials of the US Fish and Wildlife Service. The cockatoos, valued at between US\$500,000 and US\$1,000,000 were apparently shipped from Singapore.

One shipment was seized at the port of Miami on the

Sale of Rhino Horn

During 1978 and 1979, 150 kg of rhino horn and 138 kg of rhino hide were sold by Natal Parks Board, Natal's provincial wildlife department, to a dealer involved in export trade to the Far East.

South Africa is a Party to CITES and, as such, prohibits the commercial export of rhino horn. These sales did not contravene the Convention which does not cover internal trade. Of the 5 consignments sold, 3 of the receipts issued to the trader were labelled "Not for Export". The Board had not supplied the trader with export permits.

The Director of the Board, John Geddes Page, in an interview with the Sunday Tribune, admitted that, "The Board did trade in rhino horn and with the wisdom of hindsight I'm sorry we did."

Natal Parks Board reportedly has 600 rhino horns in stock now. A dealer in Cape Town, Frans Hartman has recently offered to buy them all; estimating that the average weight is 4 kg per horn, he is prepared to pay R1.2 million. The Board, however, has already rejected the offer.

South Africa's booming White rhino population poses several problems. Since 1962, Natal Parks Board has sold over 3000 animals to stabilize the population in their reserves. Originally, these went to zoos and other reserves but now most are sold to private land owners, often for the purpose of trophy hunting.

Export permits are issued for the export of trophy horns but the problem arises with the horns



grounds that the birds originated in Indonesia, where they are fully protected. The shipment had apparently travelled to Malaysia and then to Singapore before arriving in the USA. The smaller shipment arrived at Los Angeles with a certificate declaring that the birds had been captive-bred in the Philippines. However, Palm cockatoos are very difficult to breed in captivity, and it is extremely doubtful that these birds were in fact captive-bred.

and skins of rhinos which die from natural causes or during translocation. These may not be exported for primarily commercial purposes under the terms of CITES and recent internal legislation controls their sale within South Africa. Most Parks and private individuals, when faced with the problem of disposing of this material are unwilling to destroy it, and rather than risk prosecution by selling it, tend to stockpile it in the hopes that some day there may be a relaxation in the regulations. Storage is not an ideal solution and thefts of some stockpiled horns have been reported.

The Argus (South Africa), 7.11.83
L.A. Carter, PTES, South Africa.
Sunday Tribune (South Africa) - 21.8.83

* Parrot Shipments Seized

A correspondent recently informed WTMU of two consignments of parrots at Santa Cruz Airport, Bolivia, waiting to be transported to Paris and Amsterdam via Argentina and Madrid. The shipments, probably mostly of *Amazona aestiva* (Blue-fronted amazon), weighed 102 kg. The CITES Secretariat was notified and immediately contacted the Bolivian authorities who verified that no CITES permits had been authorised for these shipments, and consequently they were seized.

Kangaroo Update

At a US Department of Interior public hearing, held on June 6 in Washington, DC, the Australian Government conceded that the 1980-82 kangaroo harvests - according to the Animal Welfare Institute - were not legally controlled, as originally claimed.

The hearing, which invited testimonies from non-governmental and government representatives alike, focused on a petition by the Australian Government to have three commercially-important species removed from the US Threatened Species list (the red *Macropus rufus*, eastern grey *Macropus giganteus* and western grey *Macropus fuliginosus*) and to have the partially-lifted US kangaroo import ban permanently abolished. In 1981 the US Government succumbed to Australian Government and US leather industry pressures, and lifted a 6-year import ban for a trial period of two years (see *Traffic Bulletin* V(2):22). It justified this decision on the basis of a US Fish & Wildlife Service (FWS) estimate that there were 32 million red and grey kangaroos throughout Australia in 1980, and the implementation of a National Kangaroo Management Programme by the Australian Government.

At the hearing it was revealed that the NKMP was nothing more than the report of an ad hoc working group established by the Australian Council of Nature Conservation Ministers (CONCOM). The Australian Government has apparently conceded that the alleged management programme has no legal status, and was drawn up in 1980 in response to the threat of legal actions in the US over the potential lifting of the import ban.

In spite of the lack of a legitimate management programme, the US Government decided in August this year to allow kangaroo imports to continue. No decision was made, however, on the de-listing of the three kangaroo species, largely because of the lack of reliable data on population sizes and because of inconsistencies in available estimates. The latest figure provided by the Australian Government, based on 1980-82 aerial and ground surveys of the three species, is 19.1 million kangaroos. This number contrasts noticeably with the 32 million kangaroo estimate of 1980. Undoubtedly, the severe 1982/83 droughts have depressed kangaroo numbers, but the effects they have had on kangaroo breeding potential remain to be determined. Some sources estimate that the droughts have caused up to 70% kangaroo mortality in parts of Queensland and New South Wales.

Kangaroos have long been subject to control and management practices primarily because they compete with domestic livestock for grazing. In an attempt to regulate harvests and trade in kangaroo products in the 1970s, the Australian Government first banned all exports of kangaroo, then later introduced harvest quotas based on annual federally-authorized population estimates. In general, the level of kangaroo harvesting is set at about 12-15% of the total population. The 1983 harvest has been reduced because of the drought and in New South Wales and Queensland, less than one third of the commercial quota had been taken by the end of June. In South Australia, more than half of the commercial harvest tags (for the skins) have been withheld by the state government, pending the results of an aerial survey.

Kangaroo meat and skins are exported to many markets. The RSPCA has recently been informed by the Australian Prime Minister's office that, in 1981/82, less than 5 per cent of all Australian kangaroo products were exported to the USA, and that the 1981 lifting of the US ban did not have a marked effect on kangaroo harvest quotas.

However, it is primarily the recent opening of the US market for skins that has prompted conservation and humane groups' concerns over the possible overkill of kangaroos. Complicating the issue are reports that the illegal trade is still flourishing because the current tagging system apparently does not prevent illegally-taken skins from entering trade.

The need for reliable population data remains the most pressing issue concerning sustainable kangaroo harvesting. The Commonwealth Scientific and Industrial Research Organization (CSIRO) is currently co-ordinating intensive aerial surveys throughout Australia. The results should shed light on the present status of several kangaroo species, taking into account the effects of the recent droughts.

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RSPCA

WWF Australia

Sudan Bans Exports of Unworked

Ivory

The Sudanese Government is very concerned about the "destructive activities of poachers" and is planning to take remedial action.

In a letter to the CITES Secretariat, the Sudanese Management Authority stated that from 30 December of this year, the Sudanese Government will not permit exports of unworked ivory and no certificates or export permits will be issued after this date. They also plan to arm wildlife forces with modern weapons to "combat poaching and illegal traffic of ivory and other parts of animals across the borders of neighbouring countries".



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★ STOP PRESS ★

In this issue we report on the export of Chimpanzees Pan troglodytes (CITES Appendix I) from Sierra Leone to Japan. CITES raised this matter with the Government of Sierra Leone and has received the following response in a letter of 17 November 1983 from the Permanent Secretary at the Ministry of Agriculture and Forestry:

"Arrangements for the export of fifty chimpanzees to Japan were undertaken at diplomatic level and the Government of Sierra Leone authorized the export of these animals. The conditions under which the export was authorised do not therefore arise."

Sierra Leone is not a Party to CITES. As of the 26 November, the CITES Secretariat had not received any response from Japan, which is a Party to CITES.